JVC

SERVICE MANUAL

WIDE LCD PANEL TELEVISION

LT-20A60SJ, LT-20A60SU

Supplementary

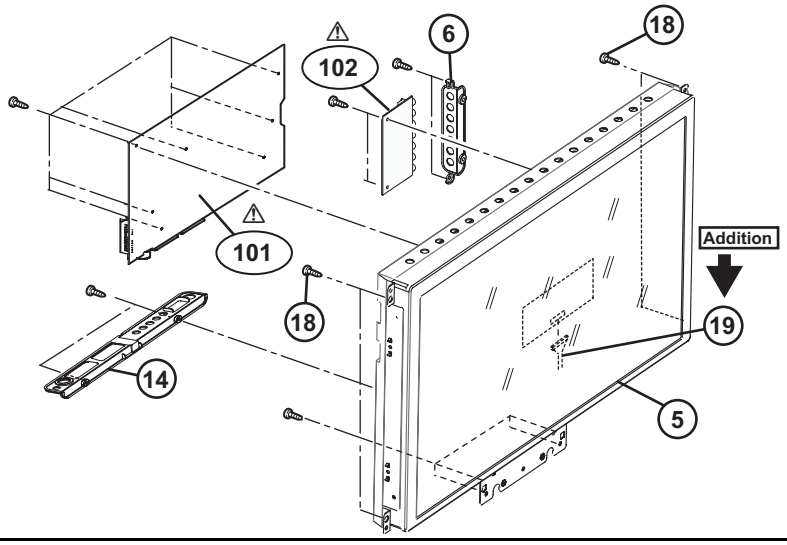
Please be informed that there are errors in the following service manuals.
LT-20A60SJ, LT-20A60SU (No.YA353 2005/11)

CORRECTION ITEM

EXPLODED VIEW PARTS LIST (Page 3-2)

⚠	Ref. No.	PART No.		PART NAME	DESCRIPTION
		INCORRECT	CORRECT		
	14	VE-20224816	VE-20173333	TERMINAL BOARD	
	19	----	VE-20237213	DIGITAL CABLE	(Addition)

EXPLODED VIEW (Page 3-3)



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SECTION 1
PRECAUTION

Please refer to "LT-20A60SJ and LT-20A60SU (No.YA353)" about this section.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

Please refer to "LT-20A60SJ and LT-20A60SU (No.YA353)" about this section.

SECTION 3
DISASSEMBLY

Please refer to "LT-20A60SJ and LT-20A60SU (No.YA353)" about this section.

SECTION 4
ADJUSTMENT

Please refer to "LT-20A60SJ and LT-20A60SU (No.YA353)" about this section.

SECTION 5
TROUBLESHOOTING

Please refer to "LT-20A60SJ and LT-20A60SU (No.YA353)" about this section.

JVC
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(No.YA353B)

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JVC

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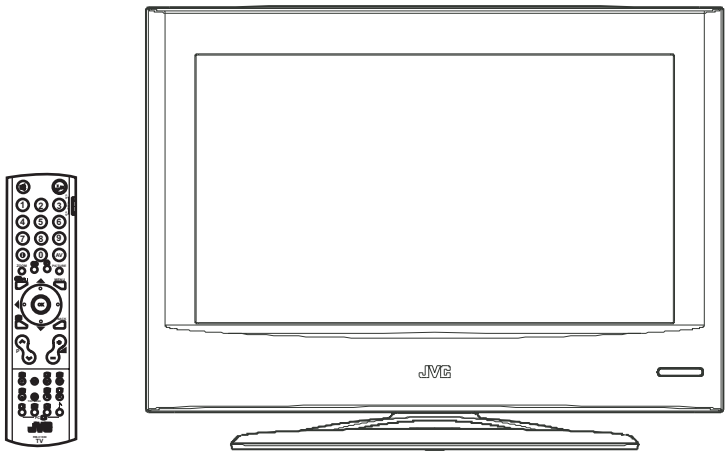
LT-20A60SJ,
LT-20A60SU

InteríArt



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No.YA353
2005/11

SPECIFICATION

Items		Contents	
		LT-20A60SU	LT-20A60SJ
Dimensions (W × H × D)		53.7cm × 41.1cm × 21.4cm [Included stand] 53.7cm × 37.7cm × 9.7cm [TV only]	
Mass		6.5kg [Included stand] 5.5kg [TV only]	
Power Input	ADAPTOR TV	AC100 ~ 240V 50Hz DC24V	
Power Consumption		80W (Standby: 3.0W)	
TV RF System		CCIR (B/G, DK, I, L)	
Colour System		PAL / SECAM / NTSC 3.58/4.43 [EXT only]	
Stereo System		A2 (B/G) / NICAM (B/G, I, L)	
Receiving Frequency	VHF UHF CATV	47 MHz - 470 MHz 470 MHz - 862 MHz S1 - S20 / S21 - S41	
Intermediate Frequency	VIF SIF	38.9 MHz (B/G, I, L) 33.4 MHz (5.5MHz : B/G) 32.9 MHz (6.0MHz : I) 32.4 MHz (6.5MHz : L)	
Colour Sub Carrier Frequency	PAL SECAM NTSC	4.43 MHz 4.40625 MHz / 4.25MHz 3.58 MHz / 4.43 MHz	
Teletext System		FLOF (Fastext level 2.5), WST(World Standard system) TOP (German system)	
LCD panel		20V-inch wide aspect (15:9)	
Screen Size		Diagonal : 50.9cm (H: 41cm × V : 30.9cm)	
Display Pixels		Horizontal : 1366 dots × Vertical : 768 dots (W-XGA)	
Audio Power Output		5W + 5W(10% THD)	
Speaker		3cm × 10cm (×2)	
Aerial terminal (VHF/UHF)		F-type connector, 75Ω unbalanced, coaxial	
EXT-1 / EXT-2 (Input / Output)		21-pin Euro connector (SCART socket) × 2	
EXT-3 (Input)	Component Audio	Y:1V(p-p) Positive (Negative sync provided), 75Ω RCA pin jack × 1 Pb / Pr : 0.7V(p-p), 75Ω RCA pin jack × 2 500mV (rms), Low impedance, RCA pin jack × 2	
EXT-4 (Input)	S-Video Video Audio	Mini-DIN 4 pin × 1 Y: 1V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286V (p-p) (Burst signal), 75 Ω 1V (p-p), Positive (Negative sync provided), 75 Ω, RCA pin jack × 1 500mV (rms), High impedance, RCA pin jack × 2	
PC (RGB) Input		D-sub 15pin × 1 R/G/B : 0.7V (p-p), 75Ω HD / VD : 1V (p-p) to 5V (p-p), high impedance < Available signal > VGA : 640 pixels × 480 pixels (Horizontal : 31.5kHz / Vertical : 60Hz) XGA : 1024 pixels × 768 pixels (Horizontal : 48.4kHz / Vertical : 60Hz)	
PC AUDIO input		3.5mm stereo mini jack × 1	
Audio output		500mV (rms), Low impedance, RCA pin jack × 2	
Sub Woofer out		500mV (rms), Low impedance, RCA pin jack × 1	
Headphone		3.5mm stereo mini jack × 1	
Remote Control Unit		RM-C1860 (AA/R6 dry cell battery × 2)	

Design & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 SAFETY PRECAUTIONS [EXCEPT FOR UK]

(1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual**. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

(4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED (NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.

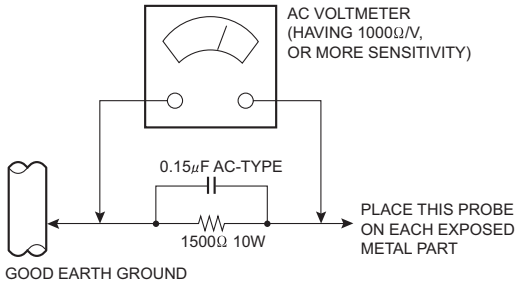
(5) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(6) **Isolation Check (Safety for Electrical Shock Hazard)**
After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

b) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000Ω per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



1.2 SAFETY PRECAUTIONS [FOR UK]

(1) The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

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(4) The leads in the products are routed and dressed with ties, clamps, tubing's, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

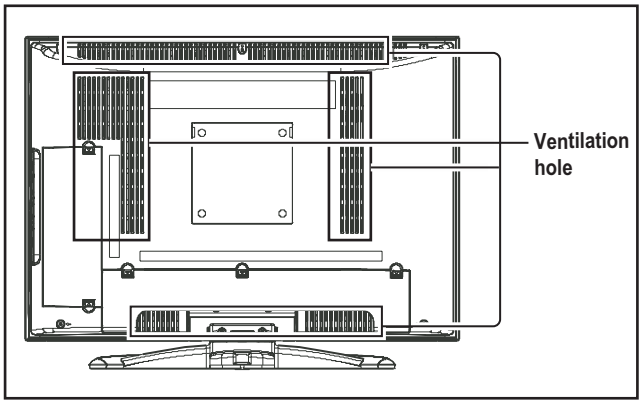
WARNING

(1) The equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 INSTALLATION

1.3.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically.Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.



1.3.2 INSTALLATION REQUIREMENTS

Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc.Install the unit on stable flooring or stands.Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.

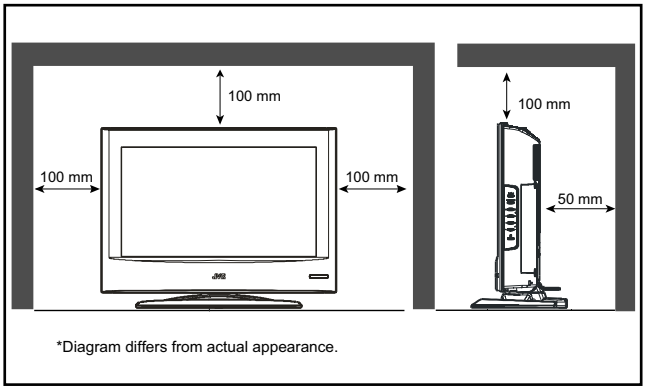


*Diagram differs from actual appearance.

1.3.3 NOTES ON HANDLING

(1) WHEN TAKING UNIT OUT OF A PACKING CASE
When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.

(2) AS FOR PRESSING OR TOUCHING A SPEAKER
Be careful not to press the opening of the speaker in the lower part of the unit and around them since the decorative sheet on the surface of the openings may be deformed.

1.4 HANDLING LCD PANEL

1.4.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

(1) USE A SPECIAL PACKING CASE FOR THE LCD PANEL
When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.

(2) ATTACH PROTECTION SHEET TO THE FRONT
Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.

(3) AVOID VIBRATIONS AND IMPACTS
The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.

(4) DO NOT PLACE EQUIPMENT HORIZONTALLY
Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.4.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

(1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and COLOUR.

(2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).

(3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol.

(4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.4.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

(1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular COLOUR.

(2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.

(3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

T-V LINK

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV,it is easier to set up the VCR and to view videos.

ZOOM

This function can change the screen size according to the picture aspect ratio.

OFF TIMER

This function can set the TV to automatically turn off after a set time.

COLOUR SYSTEM

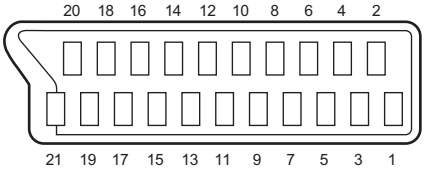
If the picture is not clear or no colour appears, change the current colour system to another colour system.

2.2 21-PIN EURO CONNECTOR (SCART) : EXT-1 / EXT-2

Pin No.	Signal designation	Matching value	EXT-1	EXT-2
1	AUDIO R output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
2	AUDIO R input	500mV(rms) (Nominal),, High impedance	Used (R1)	Used (R2)
3	AUDIO L output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
4	AUDIO GND		Used	Used
5	GND (B)		Used	Used
6	AUDIO L input	500mV(rms) (Nominal),, High impedance	Used (L1)	Used (L2)
7	B input	$700mV_{(B-W)}$, 75Ω	Used	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used	Used
9	GND (G)		Used	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)
11	G input	$700mV_{(B-W)}$, 75Ω	Used	Used
12	SDA		Not used	Used (SDA2)
13	GND (R)		Used	Used
14	GND (YS)		Used	Not used
15	R / C input	R : $700mV_{(B-W)}$, 75Ω C : $300mV_{(P-P)}$, 75Ω	Used (R)	Used (C2/R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used	Used
17	GND (VIDEO output)		Used	Used
18	GND (VIDEO input)		Used	Used
19	VIDEO output	$1V_{(P-P)}$ (Negative sync), 75Ω	Used (TV OUT)	Used (LINE OUT)
20	VIDEO / Y input	$1V_{(P-P)}$ (Negative sync), 75Ω	Used	Used
21	COMMON GND		Used	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

[Pin assignment]



2.3 TECHNICAL INFORMATION

2.3.1 LCD PANEL

This unit uses the flat type panel LCD (Liquid Crystal Display) panel that occupies as little space as possible, instead of the conventional CRT (Cathode Ray Tube), as a display unit.
Since the unit has the two polarizing filter that are at right angles to each other, the unit adopts "normally black" mode, where light does not pass through the polarizing filter and the screen is black when no voltage is applied to the liquid crystals.

2.3.1.1 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications	Remarks
Displayed colour	16777216 colours	256 colours for R, G, and B
Brightness	450cd/m^2	
Contrast ratio	400: 1	
Response time	25ms	
View angle	Horizontally: 176°, Vertically: 176°	

2.3.1.2 PIXEL FAULT

There are three pixel faults - bright fault , dark fault and flicker fault - that are respectively defined as follows.

■ **BRIGHT FAULT**

In this pixel fault, a cell that should not light originally is lighting on and off.
For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

■ **DARK FAULT**

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting.
For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

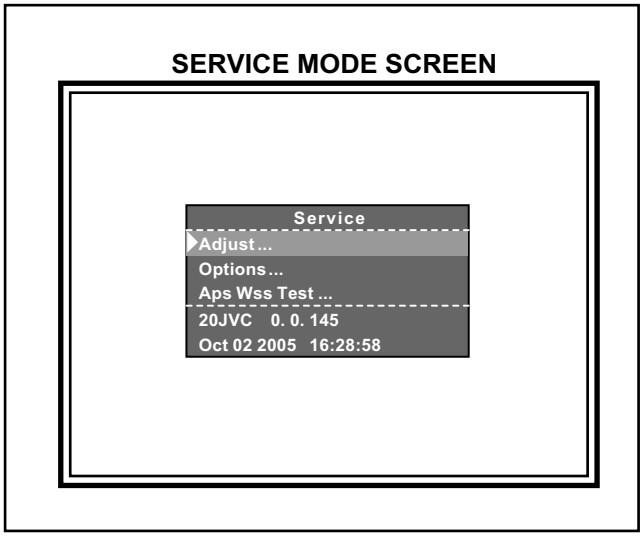
■ **FLICKER FAULT**

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.
For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

2.4 BASIC OPERATION OF SERVICE MODE

2.4.1 HOW TO ENTER THE SERVICE MODE

(1) Press **[INFORMATION]** key and **[MUTING]** key on the remote control unit simultaneously to enter the SERVICE MODE SCREEN.



2.4.2 HOW TO EXIT THE SERVICE MODE

Press the **[MENU]** key to exit the Service mode.

2.4.3 CHANGE AND MEMORY OF SETTING VALUE

■ **SELECTION OF SETTING MENU & ITEM**

- **[FUNCTION ▲/▼]** key : Select the SETTING MENU & ITEM
- **[OK]** key : Decision the SETTING MENU & ITEM

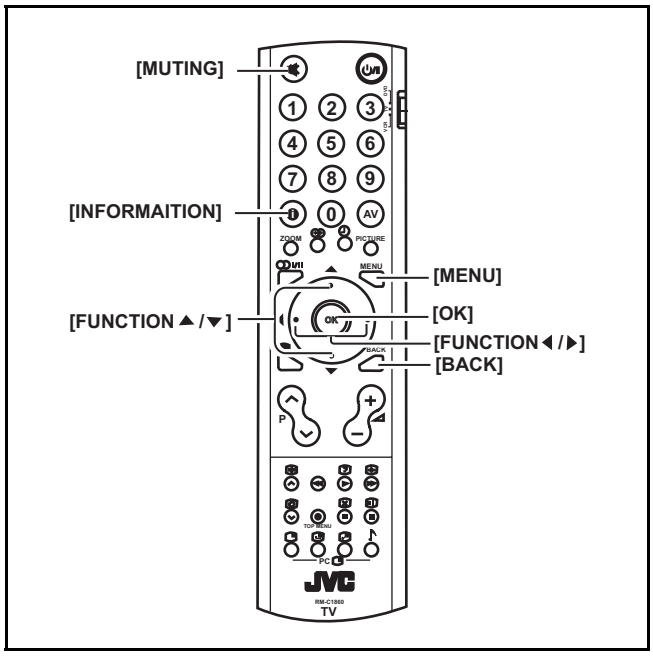
■ **CHANGE OF SETTING VALUE (DATA)**

- **[FUNCTION ◀ / ▶]** key.

■ **MEMORY OF SETTING VALUE (DATA)**

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys

2.4.4 SERVICE MODE SELECT KEY LOCATION



2.4.5 SERVICE MODE SETTING ITEMS

Setting menu	Setting items	Contents
Adjust	Group	----
	Mode	----
	Col. Temp.	----
	Contrast	----
	Brightness	----
	Colour	----
	Sharpness	----
	Red	----
	Green	----
	Blue	----
	Aps Volume	----
Option 1	First APS	If ON, TV starts with APS menu at Start-up
	BG	----
	DK	----
	I	----
	L	----
	L'	----
	FM Prs Avl On	Adjusts the FM Prescaler value, when Automatic Volume Levelling is On
	Nicam Prs Avl On	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is On
	Scart Prs Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Scart Volume Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	FM Prs Avl Off	Adjusts the FM Prescaler value, when Automatic Volume Levelling is Off
Option 2	Nicam Prs Avl Off	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is Off
	Scart Prs Avl Off	Adjusts the Scart Prescaler value, when Automatic Volume Levelling is Off
	Scart Volume Avl Off	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Avl	Enable/disable Automatic Volume Levelling System
	Sound	----
	Carrier	----
	LDLY	----
	AGC	----
Aps Wss Test	Programme	----
	VPS	----
	Pdc Format 1	----
	Pdc Format 2	----
	Name	----
	WSS	----

SECTION 3
DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

NOTE:

- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- When removing each board, remove the connectors as required.
- Taking notes of the connecting points (connector numbers) makes service procedure manageable.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.

3.1.1 REMOVING THE HINGE COVER

(1) Remove the 2 screws **[A]**.
(2) Remove the HINGE COVER.

3.1.2 REMOVING THE FOOT TOP COVER

- Remove the HINGE COVER.
  (1) Remove the 2 screws **[B]**.
  (2) Pull out the FOOT TOP COVER.

3.1.3 REMOVING THE FOOT ASSEMBLY

(1) Remove the 4 screws **[C]**.
(2) Remove the FOOT ASSEMBLY.

3.1.4 REMOVING THE THE HANDLE

- Remove the HINGE COVER.
- Remove the FOOT TOP COVER.
  (1) Remove the 4 screws **[D]**.
  (2) Remove the THE HANDLE.

3.1.5 REMOVING THE BACK COVER

- Remove the FOOT ASSEMBLY.
  (1) Remove the 5 screws **[E]**.
  (2) Remove the BACK COVER toward you.

NOTE:

If necessary, remove the HANDLE, SIDE AV COVER and BACK DOOR.

3.1.6 REMOVING THE SIDE CONTROL PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[F]**.
  (2) Remove the BUTTON FUNCTION with SIDE CONTROL PWB.
  (3) Remove the 4 craws which is fixing the SIDE CONTROL PWB.
  (4) Remove the SIDE CONTROL PWB

3.1.7 REMOVING THE METAL HANG

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 1 screw **[G]**.
  (2) Remove the METAL HANG.
  (3) Remove the opposite METAL HANG same steps.

3.1.8 REMOVING THE TERMINAL BOARD

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[H]**.
  (2) Remove the TERMINAL BOARD.

3.1.9 REMOVING THE MAIN PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the TERMINAL BRACKET.
  (1) Remove the 7 screws **[J]**.
  (2) Remove the MAIN PWB.

3.1.10 REMOVING THE AV JACK BRACKET

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[K]**.
  (2) Remove the AV JACK BRACKET.

3.1.11 REMOVING THE AV JACK PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the AV JACK BRACKET.
  (1) Remove the 2 screws **[L]**.
  (2) Remove the AV JACK PWB.

3.1.12 REMOVING THE LED PWB

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the 2 screws **[M]**.
  (2) Remove the LED PWB.

3.1.13 REMOVING THE SPEAKER

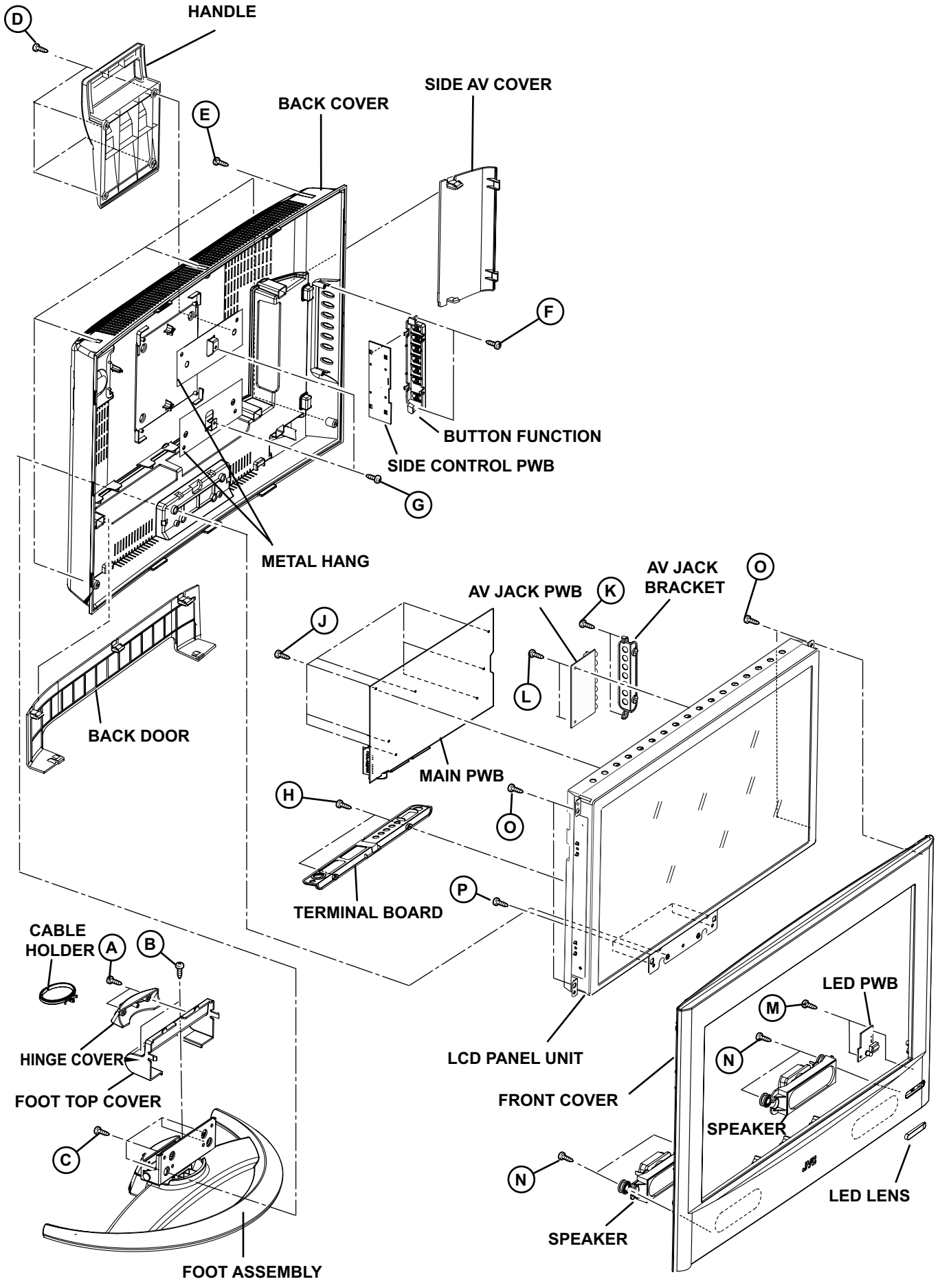
- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
  (1) Remove the speaker wire from speaker terminal.
  (2) Remove the 2 screws **[N]**.
  (3) Remove the SPEAKER PWB.
  (4) Remove the opposite speaker same steps.

3.1.14 REMOVING THE LCD PANEL UNIT

- Remove the FOOT ASSEMBLY.
- Remove the BACK COVER.
- Remove the MAIN PWB and AV JACK PWB.
  (1) Remove the 4 screws **[O]**.
  (2) Remove the 4 screw **[P]** fixing the DISPLAY SUPPORT and LCD PANEL UNIT.
  (3) Sightly raise the both sides of the LCD PANEL by hand from the FRONT COVER.

NOTE:

- Pay special attention not to break or damage on the FRONT PANEL.
- The LCD PANEL UNIT is fixed to the FRONT COVER (at the back side)by using double-side adhesive tapes. To remove the LCD PANEL UNIT, remove the adhesive tape on the FRONT COVER slowly.


D
HANDLE
E
BACK COVER
SIDE AV COVER
F
BUTTON FUNCTION
SIDE CONTROL PWB
G
METAL HANG
BACK DOOR
J
AV JACK PWB
K
AV JACK BRACKET
O
L
MAIN PWB
H
O
TERMINAL BOARD
P
CABLE HOLDER
A
B
HINGE COVER
FOOT TOP COVER
C
FOOT ASSEMBLY
LCD PANEL UNIT
LED PWB
M
N
FRONT COVER
SPEAKER
N
SPEAKER
LED LENS

3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 SETTINGS OF FACTORY SHIPMENT

3.2.1.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
TV/AV	TV

3.2.1.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
ZOOM	AUTO

3.2.1.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE

Setting item	Setting position
MODE	Bright
Contrast	33 Step
Bright-1	26 Step
Sharpness	11 Step
Colour	36 Step
Bright-2	7 Step
Colour Temp.	Cool
Nolse Red.	Min

(2) SOUND

Setting item	Setting position
Volume	10 Step
Bass	16 Step
Treble	15 Step
Balance	16 Step
Hyper Sound	Off
Sound Mode	Mono

(3) FEATURES

Setting item	Setting position
Sleep Timer	Off
Child Lock	Off
Language	English
EXT-2 Output	TV
Blue Back	Off

(4) Install [TV MODE]

Setting item	Setting position
Colour System	Auto
Decorder(EXT-2)	On
VCR	Off

(5) Install [EXT MODE]

Setting item	Setting position
Colour System	Auto
VCR	Off

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

(1) Avoid heating for more than 3 seconds.
(2) Do not rub the electrodes and the resist parts of the pattern.
(3) When removing a chip part, melt the solder adequately.
(4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

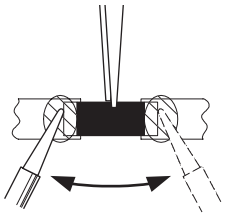
(1) Use a high insulation soldering iron with a thin pointed end of it.
(2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

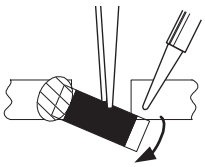
1. How to remove Chip parts

[Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



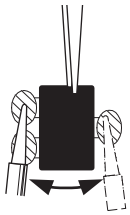
(2) Shift with the tweezers and remove the chip part.



[Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.

(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

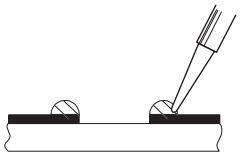


NOTE :
After removing the part, remove remaining solder from the pattern.

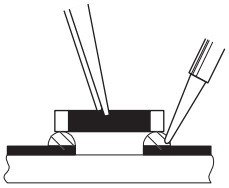
2. How to install Chip parts

[Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

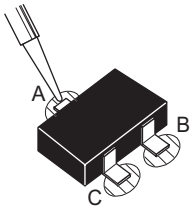


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

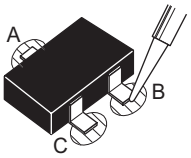


[Transistors, diodes, variable resistors, etc.]

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



SECTION 4
ADJUSTMENT

This service manual does not describe ADJUSTMENT.

SECTION 5
TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.

JVC

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(No.YA353)

Printed in Japan
VPT

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS	
CR	Carbon Resistor
FR	Fusible Resistor
PR	Plate Resistor
VR	Variable Resistor
HV R	High Voltage Resistor
MF R	Metal Film Resistor
MG R	Metal Glazed Resistor
MP R	Metal Plate Resistor
OM R	Metal Oxide Film Resistor
CMF R	Coating Metal Film Resistor
UNF R	Non-Flammable Resistor
CH V R	Chip Variable Resistor
CH MG R	Chip Metal Glazed Resistor
COMP. R	Composition Resistor
LPTC R	Linear Positive Temperature Coefficient Resistor

CAPACITORS	
C CAP.	Ceramic Capacitor
E CAP.	Electrolytic Capacitor
M CAP.	Mylar Capacitor
CH CAP.	Chip Capacitor
HV CAP.	High Voltage Capacitor
MF CAP.	Metalized Film Capacitor
MM CAP.	Metalized Mylar Capacitor
MP CAP.	Metalized Polystyrol Capacitor
PP CAP.	Polypropylene Capacitor
PS CAP.	Polystyrol Capacitor
TF CAP.	Thin Film Capacitor
MPP CAP.	Metalized Polypropylene Capacitor
TAN. CAP.	Tantalum Capacitor
CH C CAP.	Chip Ceramic Capacitor
BP E CAP.	Bi-Polar Electrolytic Capacitor
CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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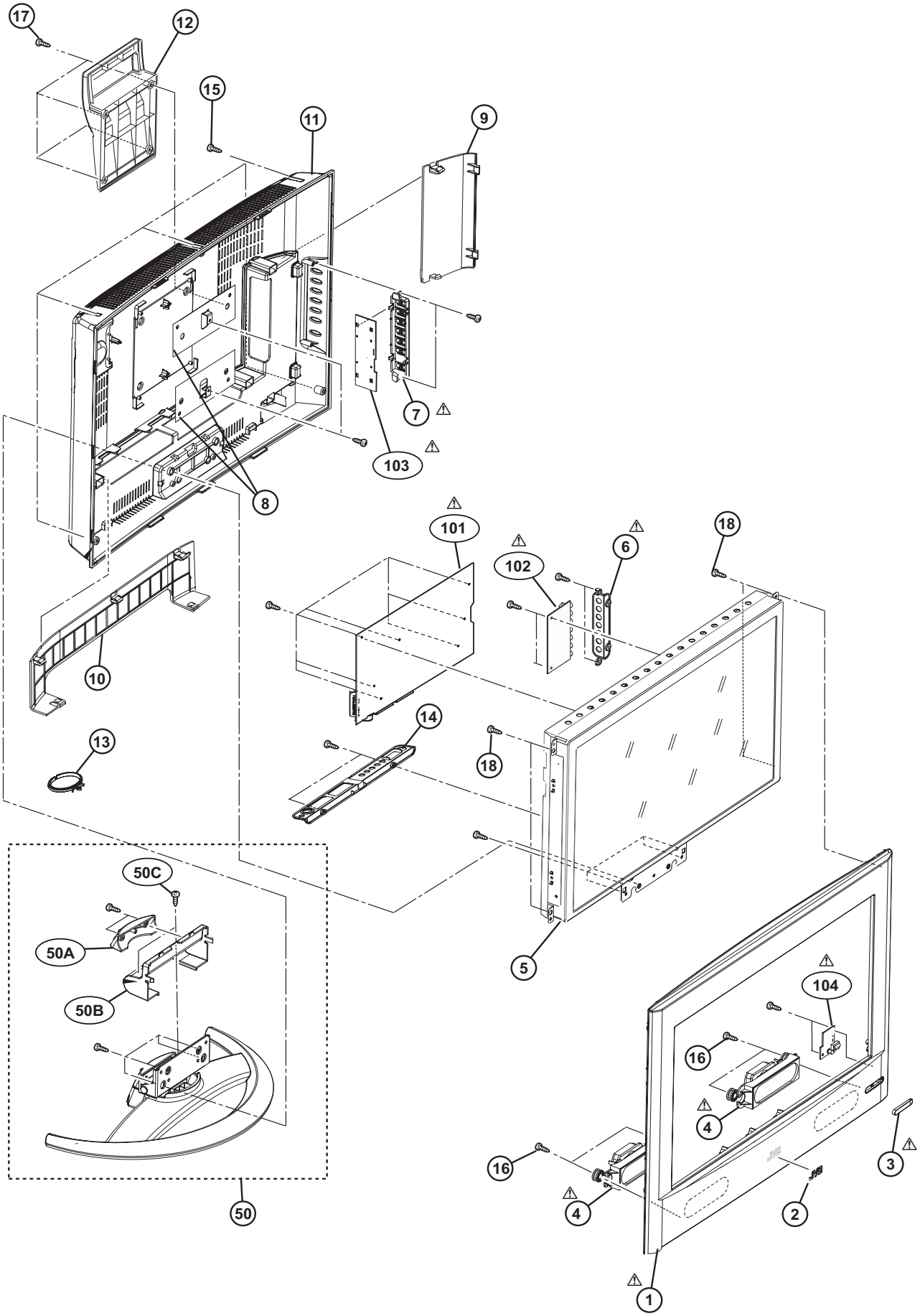
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	P.W.B ASS'Y No.	
	LT-20A60SJ	LT-20A60SU
MAIN P.W.B	VE-20220013	←
AV JACK P.W.B	VE-20224823	←
SIDE CONTROL P.W.B	VE-20224821	←
LED P.W.B	VE-20220627	←
REMOTE CONTROL UNIT	VE-30034032	←

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	1	VE-20224798	FRONT COVER		
	2	VE-20181315	LOGO JVC		
⚠	3	VE-20211659	LENS		
⚠	4	VE-30030145	SPEAKER	8Ω 10W 2x5cm(x2)	
	5	VE-30041596	LCD PANEL UNIT		
⚠	6	VE-20224813	AV JACK BRACKET		
⚠	7	VE-20224812	BUTTON FUNCTION		
	8	VE-35012930	METAL HANG		
	9	VE-20224814	SIDE AV COVER		
	10	VE-20224816	BACK DOOR		
	11	VE-20224799	BACK COVER		
	12	VE-20182430	HANDLE		
	13	VE-20176416	CABLE HOLDER		
	14	VE-20224816	TERMINAL BOARD		
	15	VE-35000186	SCREW	(M3X8)For BACK COVER(x5)	
	16	VE-35008812	SCREW	(M3X10)For SPEAKER(x4)	
	17	VE-35005051	SCREW	(M4X16)For HANDLE(x4)	
	18	VE-35003339	SCREW	(M4X12)For LCD PANEL UNIT(x4)	
	50	VE-20224793	FOOT ASSEMBLY		
	50A	VE-20224795	HINGE COVER		
	50B	VE-20224794	FOOT TOP COVER		
	50C	VE-35008191	SCREW	(M3X12)For FOOT TOP COVER(x2)	
⚠	101	VE-20220013	MAIN PWB		
⚠	102	VE-20224823	AV JACK PWB		
⚠	103	VE-20224821	SIDE CONTROL PWB		
⚠	104	VE-20220627	LED PWB		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (VE-20220013)

⚠Ref No.	Part No.	Part Name	Description	Local
IC100	VE-30020865	IC		
IC101	VE-30032066	IC		
IC102	VE-30018006	IC		
IC104	VE-30019132	IC		
IC105	VE-30034805	IC		
IC106	VE-30017956	IC		
IC107	VE-30019372	IC		
IC300	VE-LT-20A60SJ	IC	(SERVICE)	LT-20A60SJ
IC300	VE-LT-20A60SU	IC	(SERVICE)	LT-20A60SU
IC301	VE-30013571	IC		
IC302	VE-20180593	IC	(SERVICE)	
IC400	VE-30015059	IC		
IC402	VE-30004999	IC		
IC403	VE-30019372	IC		
IC500	VE-30021083	IC		
IC600	VE-30013686	IC		
IC700	VE-30018263	IC		
IC701	VE-30010024	IC		
IC702	VE-30027663	IC		
IC705	VE-30010822	IC		
IC800	VE-30033062	IC		
IC901	VE-30027613	IC		
IC902	VE-30014344	TRANSISTOR		
IC904	VE-30027612	IC		
IC906	VE-30018326	IC		
IC907	VE-30027635	IC		
IC909	VE-30007739	IC		
IC910	VE-30007739	IC		
Q100	VE-30001457	TRANSISTOR		
Q101	VE-30018060	TRANSISTOR		
Q103	VE-30001457	TRANSISTOR		
Q104	VE-30001457	TRANSISTOR		
Q105	VE-30001457	TRANSISTOR		
Q300	VE-30001458	TRANSISTOR		
Q301	VE-30001457	TRANSISTOR		
Q302	VE-30001457	TRANSISTOR		
Q303	VE-30001457	TRANSISTOR		
Q304	VE-30001457	TRANSISTOR		
Q305	VE-30001457	TRANSISTOR		
Q306	VE-30001457	TRANSISTOR		
Q307	VE-30001457	TRANSISTOR		
Q308	VE-30001458	TRANSISTOR		
Q309	VE-30001457	TRANSISTOR		
Q310	VE-30001458	TRANSISTOR		
Q311	VE-30001423	TRANSISTOR		
Q312	VE-30001458	TRANSISTOR		
Q313	VE-30001457	TRANSISTOR		
Q314	VE-30001457	TRANSISTOR		
Q315	VE-30001457	TRANSISTOR		
Q316	VE-30001457	TRANSISTOR		
Q317	VE-30001457	TRANSISTOR		
Q318	VE-30001458	TRANSISTOR		
Q319	VE-30001458	TRANSISTOR		
Q400	VE-30001457	TRANSISTOR		
Q501	VE-30001457	TRANSISTOR		
Q502	VE-30001457	TRANSISTOR		
Q600	VE-30001457	TRANSISTOR		
Q601	VE-30001457	TRANSISTOR		
Q602	VE-30001457	TRANSISTOR		
Q603	VE-30001457	TRANSISTOR		
Q700	VE-30001458	TRANSISTOR		
Q701	VE-30001457	TRANSISTOR		
Q702	VE-30001457	TRANSISTOR		
Q703	VE-30001457	TRANSISTOR		
Q704	VE-30001457	TRANSISTOR		
Q705	VE-30001457	TRANSISTOR		
Q706	VE-30001457	TRANSISTOR		
Q708	VE-30001458	TRANSISTOR		
Q709	VE-30001457	TRANSISTOR		
Q900	VE-30001457	TRANSISTOR		
Q901	VE-30001457	TRANSISTOR		
Q902	VE-30001454	TRANSISTOR		
Q904	VE-30001457	TRANSISTOR		
Q905	VE-30001457	TRANSISTOR		
D100	VE-30001285	DIODE		
D101	VE-30001285	DIODE		
D103	VE-30007169	DIODE		
D105	VE-30007169	DIODE		
D107	VE-30007169	DIODE		
D108	VE-30025773	Z DIODE		
D109	VE-30025773	Z DIODE		
D111	VE-30007169	DIODE		
D112	VE-30007169	DIODE		
D114	VE-30038472	Z DIODE		
D300	VE-30038493	Z DIODE		
D301	VE-30001285	DIODE		
D302	VE-30001285	DIODE		
D305	VE-30001285	DIODE		
D306	VE-30001285	DIODE		
D307	VE-30001285	DIODE		
D500	VE-30001285	DIODE		
D501	VE-30039051	DIODE		
D600	VE-30038475	Z DIODE		
D700	VE-30038479	Z DIODE		
D701	VE-30001285	DIODE		
D702	VE-30001285	DIODE		
D703	VE-30001285	DIODE		
D704	VE-30038475	Z DIODE		
D708	VE-30038475	Z DIODE		
D709	VE-30038475	Z DIODE		
D710	VE-30038475	Z DIODE		
D711	VE-30038480	Z DIODE		
D712	VE-30038480	Z DIODE		
D713	VE-30038480	Z DIODE		
D714	VE-30038480	Z DIODE		
D715	VE-30038475	Z DIODE		
D716	VE-30038480	Z DIODE		
D717	VE-30038480	Z DIODE		
D719	VE-30001285	DIODE		
D720	VE-30038480	Z DIODE		
D721	VE-30038480	Z DIODE		
D722	VE-30038480	Z DIODE		
D723	VE-30018574	DIODE		
D900	VE-30001313	DIODE		
D901	VE-30001313	DIODE		
D902	VE-30001285	DIODE		
D903	VE-30001343	Z DIODE		
D904	VE-30001313	DIODE		
D905	VE-30001285	DIODE		
D906	VE-30001285	DIODE		
C100	VE-30012566	CAPACITOR	22pF 50V J	
C101	VE-30012566	CAPACITOR	22pF 50V J	
C102	VE-30016654	CAPACITOR	100nF 16V K	
C104	VE-30016654	CAPACITOR	100nF 16V K	
C105	VE-30016654	CAPACITOR	100nF 16V K	
C106	VE-30016654	CAPACITOR	100nF 16V K	
C107	VE-30016654	CAPACITOR	100nF 16V K	
C108	VE-30012582	CAPACITOR	10nF 50V K	
C109	VE-30012582	CAPACITOR	10nF 50V K	
C110	VE-30012582	CAPACITOR	10nF 50V K	
C111	VE-30012582	CAPACITOR	10nF 50V K	
C112	VE-30016654	CAPACITOR	100nF 16V K	
C113	VE-30012582	CAPACITOR	10nF 50V K	
C114	VE-30016654	CAPACITOR	100nF 16V K	
C115	VE-30000371	E CAPACITOR	22uF 50V M	
C116	VE-30012590	CAPACITOR	47nF 50V K	
C117	VE-30012590	CAPACITOR	47nF 50V K	
C118	VE-30012590	CAPACITOR	47nF 50V K	
C120	VE-30016654	CAPACITOR	100nF 16V K	
C121	VE-30016654	CAPACITOR	100nF 16V K	
C122	VE-30016654	CAPACITOR	100nF 16V K	
C123	VE-30016654	CAPACITOR	100nF 16V K	
C124	VE-30016654	CAPACITOR	100nF 16V K	
C125	VE-30016654	CAPACITOR	100nF 16V K	
C126	VE-30016654	CAPACITOR	100nF 16V K	
C127	VE-30016654	CAPACITOR	100nF 16V K	
C128	VE-30016654	CAPACITOR	100nF 16V K	
C129	VE-30016654	CAPACITOR	100nF 16V K	
C130	VE-30016654	CAPACITOR	100nF 16V K	
C131	VE-30016654	CAPACITOR	100nF 16V K	
C132	VE-30012581	CAPACITOR	1nF 50V K	
C133	VE-30012587	CAPACITOR	3.3nF 50V K	
C134	VE-30012605	CAPACITOR	39nF 50V M	
C136	VE-30016654	CAPACITOR	100nF 16V K	
C137	VE-30016654	CAPACITOR	100nF 16V K	
C138	VE-30000371	E CAPACITOR	22uF 50V M	
C139	VE-30000371	E CAPACITOR	22uF 50V M	
C146	VE-30000109	CAPACITOR	470nF 63V J	
C147	VE-30016654	CAPACITOR	100nF 16V K	
C148	VE-30012575	CAPACITOR	4.7pF 50V C	
C149	VE-30012575	CAPACITOR	4.7pF 50V C	
C150	VE-30016654	CAPACITOR	100nF 16V K	
C151	VE-30016654	CAPACITOR	100nF 16V K	
C152	VE-30016654	CAPACITOR	100nF 16V K	
C153	VE-30012567	CAPACITOR	220pF 50V J	
C154	VE-30012567	CAPACITOR	220pF 50V J	
C155	VE-30012567	CAPACITOR	220pF 50V J	
C156	VE-30000371	E CAPACITOR	22uF 50V M	
C157	VE-30016654	CAPACITOR	100nF 16V K	

⚠Ref No.	Part No.	Part Name	Description	Local
C158	VE-30012567	CAPACITOR	220pF 50V J	
C159	VE-30016654	CAPACITOR	100nF 16V K	
C160	VE-30012567	CAPACITOR	220pF 50V J	
C161	VE-30012567	CAPACITOR	220pF 50V J	
C162	VE-30000371	E CAPACITOR	22uF 50V M	
C163	VE-30016654	CAPACITOR	100nF 16V K	
C164	VE-30012567	CAPACITOR	220pF 50V J	
C165	VE-30016654	CAPACITOR	100nF 16V K	
C166	VE-30012567	CAPACITOR	220pF 50V J	
C167	VE-30016654	CAPACITOR	100nF 16V K	
C168	VE-30016654	CAPACITOR	100nF 16V K	
C169	VE-30012567	CAPACITOR	220pF 50V J	
C170	VE-30012567	CAPACITOR	220pF 50V J	
C171	VE-30016654	CAPACITOR	100nF 16V K	
C172	VE-30012567	CAPACITOR	220pF 50V J	
C174	VE-30016654	CAPACITOR	100nF 16V K	
C175	VE-30012567	CAPACITOR	220pF 50V J	
C176	VE-30016654	CAPACITOR	100nF 16V K	
C177	VE-30000371	E CAPACITOR	22uF 50V M	
C178	VE-30016654	CAPACITOR	100nF 16V K	
C183	VE-30016654	CAPACITOR	100nF 16V K	
C185	VE-30000352	E CAPACITOR	100uF 16V M	
C187	VE-30012573	CAPACITOR	47pF 50V J	
C189	VE-30016654	CAPACITOR	100nF 16V K	
C190	VE-30016654	CAPACITOR	100nF 16V K	
C217	VE-30012581	CAPACITOR	1nF 50V K	
C218	VE-30012575	CAPACITOR	4.7pF 50V C	
C219	VE-30000345	E CAPACITOR	10uF 50V M	
C300	VE-30000352	E CAPACITOR	100uF 16V M	
C301	VE-30016654	CAPACITOR	100nF 16V K	
C302	VE-30000371	E CAPACITOR	22uF 50V M	
C303	VE-30016654	CAPACITOR	100nF 16V K	
C304	VE-30016654	CAPACITOR	100nF 16V K	
C305	VE-30000371	E CAPACITOR	22uF 50V M	
C306	VE-30016654	CAPACITOR	100nF 16V K	
C307	VE-30016654	CAPACITOR	100nF 16V K	
C308	VE-30000371	E CAPACITOR	22uF 50V M	
C309	VE-30016654	CAPACITOR	100nF 16V K	
C310	VE-30016654	CAPACITOR	100nF 16V K	
C311	VE-30016654	CAPACITOR	100nF 16V K	
C312	VE-30016654	CAPACITOR	100nF 16V K	
C313	VE-30016654	CAPACITOR	100nF 16V K	
C314	VE-30000109	CAPACITOR	470nF 63V J	
C315	VE-30016654	CAPACITOR	100nF 16V K	
C316	VE-30000352	E CAPACITOR	100uF 16V M	
C317	VE-30012569	CAPACITOR	33pF 50V J	
C318	VE-30012569	CAPACITOR	33pF 50V J	
C319	VE-30000371	E CAPACITOR	22uF 50V M	
C320	VE-30016654	CAPACITOR	100nF 16V K	
C321	VE-30016654	CAPACITOR	100nF 16V K	
C324	VE-30000371	E CAPACITOR	22uF 50V M	
C325	VE-30012611	CAPACITOR	120pF 50V J	
C326	VE-30012576	CAPACITOR	56pF 50V J	
C327	VE-30016654	CAPACITOR	100nF 16V K	
C328	VE-30000393	E CAPACITOR	3.3uF 50V M	
C331	VE-30012607	CAPACITOR	150pF 50V J	
C332	VE-30016654	CAPACITOR	100nF 16V K	
C333	VE-30016654	CAPACITOR	100nF 16V K	
C334	VE-30000354	E CAPACITOR	100uF 35V M	
C335	VE-30016654	CAPACITOR	100nF 16V K	
C336	VE-30012611	CAPACITOR	120pF 50V J	
C337	VE-30016654	CAPACITOR	100nF 16V K	
C338	VE-30016654	CAPACITOR	100nF 16V K	
C339	VE-30016654	CAPACITOR	100nF 16V K	
C340	VE-30020694	CAPACITOR	1uF 16V Z	
C400	VE-30012609	CAPACITOR	68nF 50V K	
C401	VE-30012583	CAPACITOR	1.5nF 50V K	
C402	VE-30012590	CAPACITOR	47nF 50V K	
C403	VE-30016654	CAPACITOR	100nF 16V K	
C404	VE-30012613	CAPACITOR	3.3pF 50V C	
C405	VE-30012613	CAPACITOR	3.3pF 50V C	
C406	VE-30000315	CAPACITOR	220nF 25V Z	
C407	VE-30012583	CAPACITOR	1.5nF 50V K	
C408	VE-30012572	CAPACITOR	390pF 50V J	
C409	VE-30000345	E CAPACITOR	10uF 50V M	
C410	VE-30012590	CAPACITOR	47nF 50V K	
C411	VE-30000068	CAPACITOR MKT	1nF 63V K	
C412	VE-30007082	CAPACITOR	680nF 63V J	
C413	VE-30007082	CAPACITOR	680nF 63V J	
C414	VE-30012582	CAPACITOR	10nF 50V K	
C415	VE-30000345	E CAPACITOR	10uF 50V M	
C416	VE-30012590	CAPACITOR	47nF 50V K	
C420	VE-30000294	CAPACITOR	100nF 50V K	
C421	VE-30000294	CAPACITOR	100nF 50V K	
C422	VE-30000294	CAPACITOR	100nF 50V K	
C424	VE-30016654	CAPACITOR	100nF 16V K	
C425	VE-30000315	CAPACITOR	220nF 25V Z	
C426	VE-30012583	CAPACITOR	1.5nF 50V K	
C427	VE-30012572	CAPACITOR	390pF 50V J	
C428	VE-30012590	CAPACITOR	47nF 50V K	

⚠Ref No.	Part No.	Part Name	Description	Local
C429	VE-30012583	CAPACITOR	1.5nF 50V K	
C430	VE-30012609	CAPACITOR	68nF 50V K	
C431	VE-30000315	CAPACITOR	220nF 25V Z	
C432	VE-30000315	CAPACITOR	220nF 25V Z	
C433	VE-30000315	CAPACITOR	220nF 25V Z	
C434	VE-30012570	CAPACITOR	330pF 50V J	
C435	VE-30012570	CAPACITOR	330pF 50V J	
C436	VE-30012570	CAPACITOR	330pF 50V J	
C437	VE-30007082	CAPACITOR	680nF 63V J	
C438	VE-30000371	E CAPACITOR	22uF 50V M	
C439	VE-30012609	CAPACITOR	68nF 50V K	
C440	VE-30000352	E CAPACITOR	100uF 16V M	
C441	VE-30016654	CAPACITOR	100nF 16V K	
C442	VE-30012569	CAPACITOR	33pF 50V J	
C443	VE-30016654	CAPACITOR	100nF 16V K	
C485	VE-30016654	CAPACITOR	100nF 16V K	
C486	VE-30016654	CAPACITOR	100nF 16V K	
C487	VE-30016654	CAPACITOR	100nF 16V K	
C488	VE-30016654	CAPACITOR	100nF 16V K	
C489	VE-30016654	CAPACITOR	100nF 16V K	
C490	VE-30016654	CAPACITOR	100nF 16V K	
C491	VE-30016654	CAPACITOR	100nF 16V K	
C492	VE-30000345	E CAPACITOR	10uF 50V M	
C493	VE-30000294	CAPACITOR	100nF 50V K	
C494	VE-30012569	CAPACITOR	33pF 50V J	
C495	VE-30012569	CAPACITOR	33pF 50V J	
C496	VE-30012569	CAPACITOR	33pF 50V J	
C502	VE-30016654	CAPACITOR	100nF 16V K	
C503	VE-30000345	E CAPACITOR	10uF 50V M	
C505	VE-30000400	E CAPACITOR	47uF 50V M	
C506	VE-30012582	CAPACITOR	10nF 50V K	
C507	VE-30012572	CAPACITOR	390pF 50V J	
C508	VE-30000109	CAPACITOR	470nF 63V J	
C509	VE-30012582	CAPACITOR	10nF 50V K	
C510	VE-30012566	CAPACITOR	22pF 50V J	
C511	VE-30000109	CAPACITOR	470nF 63V J	
C512	VE-30016654	CAPACITOR	100nF 16V K	
C513	VE-30012583	CAPACITOR	1.5nF 50V K	
C514	VE-30016654	CAPACITOR	100nF 16V K	
C515	VE-30016654	CAPACITOR	100nF 16V K	
C517	VE-30012569	CAPACITOR	33pF 50V J	
C519	VE-30016654	CAPACITOR	100nF 16V K	
C520	VE-30012582	CAPACITOR	10nF 50V K	
C522	VE-30000315	CAPACITOR	220nF 25V Z	
C523	VE-30000371	E CAPACITOR	22uF 50V M	
C524	VE-30016654	CAPACITOR	100nF 16V K	
C525	VE-30000407	E CAPACITOR	470uF 16V M	
C526	VE-30016654	CAPACITOR	100nF 16V K	
C527	VE-30000345	E CAPACITOR	10uF 50V M	
C600	VE-30000352	E CAPACITOR	100uF 16V M	
C601	VE-30000074	CAPACITOR	100nF 63V J	
C602	VE-30000074	CAPACITOR	100nF 63V J	
C603	VE-30000074	CAPACITOR	100nF 63V J	
C604	VE-30016654	CAPACITOR	100nF 16V K	
C605	VE-30016654	CAPACITOR	100nF 16V K	
C606	VE-30000074	CAPACITOR	100nF 63V J	
C607	VE-30012569	CAPACITOR	33pF 50V J	
C608	VE-30016654	CAPACITOR	100nF 16V K	
C609	VE-30016654	CAPACITOR	100nF 16V K	
C610	VE-30016654	CAPACITOR	100nF 16V K	
C611	VE-30016654	CAPACITOR	100nF 16V K	
C612	VE-30016654	CAPACITOR	100nF 16V K	
C613	VE-30016654	CAPACITOR	100nF 16V K	
C614	VE-30016654	CAPACITOR	100nF 16V K	
C700	VE-30016654	CAPACITOR	100nF 16V K	
C701	VE-30012587	CAPACITOR	3.3nF 50V K	
C702	VE-30000352	E CAPACITOR	100uF 16V M	
C703	VE-30012587	CAPACITOR	3.3nF 50V K	
C704	VE-30012589	CAPACITOR	4.7nF 50V K	
C705	VE-30012589	CAPACITOR	4.7nF 50V K	
C706	VE-30012589	CAPACITOR	4.7nF 50V K	
C707	VE-30012589	CAPACITOR	4.7nF 50V K	
C708	VE-30016654	CAPACITOR	100nF 16V K	
C709	VE-30000315	CAPACITOR	220nF 25V Z	
C710	VE-30000315	CAPACITOR	220nF 25V Z	
C711	VE-30000315	CAPACITOR	220nF 25V Z	
C712	VE-30000315	CAPACITOR	220nF 25V Z	
C713	VE-30012576	CAPACITOR	56pF 50V J	
C714	VE-30016654	CAPACITOR	100nF 16V K	
C715	VE-30000393	E CAPACITOR	3.3uF 50V M	
C716	VE-30000345	E CAPACITOR	10uF 50V M	
C717	VE-30000345	E CAPACITOR	10uF 50V M	
C718	VE-30000345	E CAPACITOR	10uF 50V M	
C719	VE-30012581	CAPACITOR	1nF 50V K	
C720	VE-30012581	CAPACITOR	1nF 50V K	
C721	VE-30012565	CAPACITOR	1.8pF 50V J	
C722	VE-30012565	CAPACITOR	1.8pF 50V J	
C723	VE-30012581	CAPACITOR	1nF 50V K	
C724	VE-30012581	CAPACITOR	1nF 50V K	
C725	VE-30012585	CAPACITOR	2.2nF 50V K	

⚠Ref No.	Part No.	Part Name	Description	Local
C726	VE-30012576	CAPACITOR	56pF 50V J	
C727	VE-30016654	CAPACITOR	100nF 16V K	
C728	VE-30016654	CAPACITOR	100nF 16V K	
C729	VE-30012585	CAPACITOR	2.2nF 50V K	
C730	VE-30012607	CAPACITOR	150pF 50V J	
C731	VE-30012607	CAPACITOR	150pF 50V J	
C732	VE-30000315	CAPACITOR	220nF 25V Z	
C733	VE-30000315	CAPACITOR	220nF 25V Z	
C734	VE-30016654	CAPACITOR	100nF 16V K	
C735	VE-30012568	CAPACITOR	270pF 50V J	
C736	VE-30000352	E CAPACITOR	100uF 16V M	
C737	VE-30012589	CAPACITOR	4.7nF 50V K	
C738	VE-30000352	E CAPACITOR	100uF 16V M	
C739	VE-30000362	E CAPACITOR	1uF 50V M	
C740	VE-30012568	CAPACITOR	270pF 50V J	
C741	VE-30012589	CAPACITOR	4.7nF 50V K	
C742	VE-30000371	E CAPACITOR	22uF 50V M	
C743	VE-30000371	E CAPACITOR	22uF 50V M	
C744	VE-30000371	E CAPACITOR	22uF 50V M	
C745	VE-30000371	E CAPACITOR	22uF 50V M	
C746	VE-30012567	CAPACITOR	220pF 50V J	
C747	VE-30012574	CAPACITOR	470pF 50V J	
C748	VE-30012582	CAPACITOR	10nF 50V K	
C749	VE-30016654	CAPACITOR	100nF 16V K	
C750	VE-30012576	CAPACITOR	56pF 50V J	
C751	VE-30000407	E CAPACITOR	470uF 16V M	
C752	VE-30012585	CAPACITOR	2.2nF 50V K	
C753	VE-30012585	CAPACITOR	2.2nF 50V K	
C754	VE-30012578	CAPACITOR	68pF 50V J	
C755	VE-30012578	CAPACITOR	68pF 50V J	
C756	VE-30012585	CAPACITOR	2.2nF 50V K	
C757	VE-30012585	CAPACITOR	2.2nF 50V K	
C758	VE-30000315	CAPACITOR	220nF 25V Z	
C759	VE-30000315	CAPACITOR	220nF 25V Z	
C760	VE-30012581	CAPACITOR	1nF 50V K	
C761	VE-30012581	CAPACITOR	1nF 50V K	
C762	VE-30012589	CAPACITOR	4.7nF 50V K	
C763	VE-30012589	CAPACITOR	4.7nF 50V K	
C764	VE-30012589	CAPACITOR	4.7nF 50V K	
C765	VE-30012589	CAPACITOR	4.7nF 50V K	
C766	VE-30016654	CAPACITOR	100nF 16V K	
C767	VE-30012607	CAPACITOR	150pF 50V J	
C768	VE-30012607	CAPACITOR	150pF 50V J	
C769	VE-30000371	E CAPACITOR	22uF 50V M	
C770	VE-30000371	E CAPACITOR	22uF 50V M	
C771	VE-30000315	CAPACITOR	220nF 25V Z	
C772	VE-30012581	CAPACITOR	1nF 50V K	
C773	VE-30000315	CAPACITOR	220nF 25V Z	
C774	VE-30012581	CAPACITOR	1nF 50V K	
C775	VE-30000345	E CAPACITOR	10uF 50V M	
C776	VE-30000294	CAPACITOR	100nF 50V K	
C777	VE-30000294	CAPACITOR	100nF 50V K	
C778	VE-30000294	CAPACITOR	100nF 50V K	
C779	VE-30012567	CAPACITOR	220pF 50V J	
C780	VE-30012582	CAPACITOR	10nF 50V K	
C781	VE-30012582	CAPACITOR	10nF 50V K	
C782	VE-30000294	CAPACITOR	100nF 50V K	
C783	VE-30000294	CAPACITOR	100nF 50V K	
C784	VE-30000345	E CAPACITOR	10uF 50V M	
C785	VE-30012581	CAPACITOR	1nF 50V K	
C786	VE-30012581	CAPACITOR	1nF 50V K	
C787	VE-30020694	CAPACITOR	1uF 16V Z	
C788	VE-30020694	CAPACITOR	1uF 16V Z	
C789	VE-30020694	CAPACITOR	1uF 16V Z	
C790	VE-30020694	CAPACITOR	1uF 16V Z	
C791	VE-30020694	CAPACITOR	1uF 16V Z	
C792	VE-30000294	CAPACITOR	100nF 50V K	
C793	VE-30012582	CAPACITOR	10nF 50V K	
C794	VE-30012582	CAPACITOR	10nF 50V K	
C795	VE-30012581	CAPACITOR	1nF 50V K	
C796	VE-30012581	CAPACITOR	1nF 50V K	
C797	VE-30000294	CAPACITOR	100nF 50V K	
C798	VE-30012574	CAPACITOR	470pF 50V J	
C799	VE-30012567	CAPACITOR	220pF 50V J	
C801	VE-30000294	CAPACITOR	100nF 50V K	
C802	VE-30000294	CAPACITOR	100nF 50V K	
C803	VE-30000345	E CAPACITOR	10uF 50V M	
C804	VE-30016654	CAPACITOR	100nF 16V K	
C805	VE-30012581	CAPACITOR	1nF 50V K	
C806	VE-30000354	E CAPACITOR	100uF 35V M	
C807	VE-30012574	CAPACITOR	470pF 50V J	
C808	VE-30000315	CAPACITOR	220nF 25V Z	
C809	VE-30000315	CAPACITOR	220nF 25V Z	
C810	VE-30012582	CAPACITOR	10nF 50V K	
C811	VE-30016654	CAPACITOR	100nF 16V K	
C812	VE-30000315	CAPACITOR	220nF 25V Z	
C814	VE-30016654	CAPACITOR	100nF 16V K	
C815	VE-30012582	CAPACITOR	10nF 50V K	
C816	VE-30012582	CAPACITOR	10nF 50V K	
C817	VE-30016654	CAPACITOR	100nF 16V K	
C818	VE-30016654	CAPACITOR	100nF 16V K	
C820	VE-30000315	CAPACITOR	220nF 25V Z	
C823	VE-30012560	CAPACITOR	100pF 50V J	
C824	VE-30012560	CAPACITOR	100pF 50V J	
C825	VE-30012581	CAPACITOR	1nF 50V K	
C827	VE-30000352	E CAPACITOR	100uF 16V M	
C828	VE-30016654	CAPACITOR	100nF 16V K	
C829	VE-30012582	CAPACITOR	10nF 50V K	
C830	VE-30016654	CAPACITOR	100nF 16V K	
C831	VE-30000371	E CAPACITOR	22uF 50V M	
C832	VE-30012562	CAPACITOR	15pF 50V J	
C833	VE-30016654	CAPACITOR	100nF 16V K	
C834	VE-30020694	CAPACITOR	1uF 16V Z	
C835	VE-30020694	CAPACITOR	1uF 16V Z	
C837	VE-30020694	CAPACITOR	1uF 16V Z	
C839	VE-30020694	CAPACITOR	1uF 16V Z	
C840	VE-30020694	CAPACITOR	1uF 16V Z	
C846	VE-30000407	E CAPACITOR	470uF 16V M	
C847	VE-30012569	CAPACITOR	33pF 50V J	
C848	VE-30012569	CAPACITOR	33pF 50V J	
C849	VE-30012574	CAPACITOR	470pF 50V J	
C850	VE-30012569	CAPACITOR	33pF 50V J	
C851	VE-30012574	CAPACITOR	470pF 50V J	
C852	VE-30012574	CAPACITOR	470pF 50V J	
C853	VE-30012574	CAPACITOR	470pF 50V J	
C858	VE-30012569	CAPACITOR	33pF 50V J	
C859	VE-30012569	CAPACITOR	33pF 50V J	
C860	VE-30012569	CAPACITOR	33pF 50V J	
C861	VE-30020694	CAPACITOR	1uF 16V Z	
C862	VE-30016654	CAPACITOR	100nF 16V K	
C863	VE-30012581	CAPACITOR	1nF 50V K	
C900	VE-30000354	E CAPACITOR	100uF 35V M	
C903	VE-30000354	E CAPACITOR	100uF 35V M	
C904	VE-30012582	CAPACITOR	10nF 50V K	
C908	VE-30000359	E CAPACITOR	1000uF 16V M	
C909	VE-30016654	CAPACITOR	100nF 16V K	
C910	VE-30000354	E CAPACITOR	100uF 35V M	
C911	VE-30012582	CAPACITOR	10nF 50V K	
C912	VE-30000359	E CAPACITOR	1000uF 16V M	
C913	VE-30016654	CAPACITOR	100nF 16V K	
C915	VE-30016654	CAPACITOR	100nF 16V K	
C916	VE-30016654	CAPACITOR	100nF 16V K	
C917	VE-30000371	E CAPACITOR	22uF 50V M	
C918	VE-30000371	E CAPACITOR	22uF 50V M	
C919	VE-30016654	CAPACITOR	100nF 16V K	
C920	VE-30000354	E CAPACITOR	100uF 35V M	
C921	VE-30012582	CAPACITOR	10nF 50V K	
C922	VE-30000359	E CAPACITOR	1000uF 16V M	
C923	VE-30016654	CAPACITOR	100nF 16V K	
C924	VE-30012576	CAPACITOR	56pF 50V J	
C925	VE-30012560	CAPACITOR	100pF 50V J	
C926	VE-30000371	E CAPACITOR	22uF 50V M	
C927	VE-30000294	CAPACITOR	100nF 50V K	
C928	VE-30000345	E CAPACITOR	10uF 50V M	
C929	VE-30000294	CAPACITOR	100nF 50V K	
C930	VE-30000371	E CAPACITOR	22uF 50V M	
C932	VE-30000294	CAPACITOR	100nF 50V K	
C933	VE-30000294	CAPACITOR	100nF 50V K	
C934	VE-30031594	E CAPACITOR	2200uF 10V M	
C935	VE-30016654	CAPACITOR	100nF 16V K	
C936	VE-30016654	CAPACITOR	100nF 16V K	
C937	VE-30000371	E CAPACITOR	22uF 50V M	
C938	VE-30000352	E CAPACITOR	100uF 16V M	
C941	VE-30000294	CAPACITOR	100nF 50V K	
C7XX1	VE-30000375	E CAPACITOR	220uF 16V M	
R100	VE-30012713	RESISTOR	1/16W 75R J	
R101	VE-30012713	RESISTOR	1/16W 75R J	
R102	VE-30012713	RESISTOR	1/16W 75R J	
R103	VE-30012713	RESISTOR	1/16W 75R J	
R104	VE-30012713	RESISTOR	1/16W 75R J	
R105	VE-30012641	RESISTOR	1/16W 10K J	
R106	VE-30012641	RESISTOR	1/16W 10K J	
R107	VE-30012510	RESISTOR	1/16W 100R J	
R108	VE-30012510	RESISTOR	1/16W 100R J	
R109	VE-30012692	RESISTOR	1/16W 4.7K J	
R110	VE-30012692	RESISTOR	1/16W 4.7K J	
R111	VE-30012510	RESISTOR	1/16W 100R J	
R121	VE-30012677	RESISTOR	1/16W 3.3K J	
R122	VE-30012510	RESISTOR	1/16W 100R J	
R123	VE-30012510	RESISTOR	1/16W 100R J	
R127	VE-30012641	RESISTOR	1/16W 10K J	
R128	VE-30012641	RESISTOR	1/16W 10K J	
R130	VE-30030692	FERRITE NET	120R/100MHz 150mA	
R131	VE-30030692	FERRITE NET	120R/100MHz 150mA	
R132	VE-30030692	FERRITE NET	120R/100MHz 150mA	

⚠Ref No.	Part No.	Part Name	Description	Local
R133	VE-30030692	FERRITE NET	120R/100MHz 150mA	
R134	VE-30030692	FERRITE NET	120R/100MHz 150mA	
R135	VE-30030692	FERRITE NET	120R/100MHz 150mA	
R136	VE-30012506	RESISTOR	1/16W 1.5K J	
R137	VE-30012506	RESISTOR	1/16W 1.5K J	
R138	VE-30012506	RESISTOR	1/16W 1.5K J	
R139	VE-30012657	RESISTOR	1/16W 1K J	
R141	VE-30012641	RESISTOR	1/16W 10K J	
R142	VE-30012657	RESISTOR	1/16W 1K J	
R143	VE-30012657	RESISTOR	1/16W 1K J	
R145	VE-30012510	RESISTOR	1/16W 100R J	
R146	VE-30012510	RESISTOR	1/16W 100R J	
R147	VE-30012510	RESISTOR	1/16W 100R J	
R148	VE-30012510	RESISTOR	1/16W 100R J	
R149	VE-30012641	RESISTOR	1/16W 10K J	
R150	VE-30012657	RESISTOR	1/16W 1K J	
R151	VE-30012657	RESISTOR	1/16W 1K J	
R152	VE-30012655	RESISTOR	1/16W 180R J	
R156	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R157	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R158	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R159	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R160	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R161	VE-30017653	RESISTOR ARRAY	1/16W 47RX4 J	
R162	VE-30012509	RESISTOR	1/16W 100K J	
R165	VE-30025836	FERRITE NET	240R/100MHz 150mA	
R166	VE-30025836	FERRITE NET	240R/100MHz 150mA	
R167	VE-30020529	FERRITE	120R/100MHz 200mA	
R168	VE-30012641	RESISTOR	1/16W 10K J	
R169	VE-30012641	RESISTOR	1/16W 10K J	
R170	VE-30012641	RESISTOR	1/16W 10K J	
R172	VE-30012641	RESISTOR	1/16W 10K J	
R173	VE-30012641	RESISTOR	1/16W 10K J	
R174	VE-30012641	RESISTOR	1/16W 10K J	
R175	VE-30012641	RESISTOR	1/16W 10K J	
R176	VE-30012641	RESISTOR	1/16W 10K J	
R177	VE-30012641	RESISTOR	1/16W 10K J	
R178	VE-30012641	RESISTOR	1/16W 10K J	
R179	VE-30012641	RESISTOR	1/16W 10K J	
R180	VE-30012641	RESISTOR	1/16W 10K J	
R181	VE-30012641	RESISTOR	1/16W 10K J	
R182	VE-30012641	RESISTOR	1/16W 10K J	
R183	VE-30012657	RESISTOR	1/16W 1K J	
R184	VE-30012657	RESISTOR	1/16W 1K J	
R185	VE-30012641	RESISTOR	1/16W 10K J	
R189	VE-30012657	RESISTOR	1/16W 1K J	
R197	VE-30022083	RESISTOR	1/16W 330R J	
R300	VE-30012657	RESISTOR	1/16W 1K J	
R301	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R302	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R303	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R304	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R305	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R306	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R307	VE-30018409	RESISTOR ARRAY	1/16W 330R J	
R308	VE-30012657	RESISTOR	1/16W 1K J	
R309	VE-30012669	RESISTOR	1/16W 22K J	
R310	VE-30012510	RESISTOR	1/16W 100R J	
R311	VE-30012510	RESISTOR	1/16W 100R J	
R312	VE-30012510	RESISTOR	1/16W 100R J	
R313	VE-30012679	RESISTOR	1/16W 3.9K J	
R314	VE-30012679	RESISTOR	1/16W 3.9K J	
R315	VE-30012692	RESISTOR	1/16W 4.7K J	
R316	VE-30012679	RESISTOR	1/16W 3.9K J	
R317	VE-30012650	RESISTOR	1/16W 15K J	
R318	VE-30012659	RESISTOR	1/16W 2.2K J	
R319	VE-30012692	RESISTOR	1/16W 4.7K J	
R320	VE-30012659	RESISTOR	1/16W 2.2K J	
R321	VE-30012692	RESISTOR	1/16W 4.7K J	
R322	VE-30012695	RESISTOR	1/16W 470R J	
R323	VE-30012987	RESISTOR	1/16W 56R J	
R324	VE-30012692	RESISTOR	1/16W 4.7K J	
R325	VE-30012695	RESISTOR	1/16W 470R J	
R326	VE-30012695	RESISTOR	1/16W 470R J	
R327	VE-30012695	RESISTOR	1/16W 470R J	
R328	VE-30012685	RESISTOR	1/16W 33K J	
R329	VE-30012685	RESISTOR	1/16W 33K J	
R330	VE-30012685	RESISTOR	1/16W 33K J	
R331	VE-30012685	RESISTOR	1/16W 33K J	
R332	VE-30012510	RESISTOR	1/16W 100R J	
R333	VE-30012510	RESISTOR	1/16W 100R J	
R334	VE-30012705	RESISTOR	1/16W 6.8K J	
R335	VE-30012705	RESISTOR	1/16W 6.8K J	
R336	VE-30012692	RESISTOR	1/16W 4.7K J	
R337	VE-30012692	RESISTOR	1/16W 4.7K J	
R339	VE-30012509	RESISTOR	1/16W 100K J	
R340	VE-30012692	RESISTOR	1/16W 4.7K J	
R341	VE-30012644	RESISTOR	1/16W 12K J	
R342	VE-30012668	RESISTOR	1/16W 220R J	
R343	VE-30012668	RESISTOR	1/16W 220R J	
R344	VE-30012657	RESISTOR	1/16W 1K J	
R345	VE-30012669	RESISTOR	1/16W 22K J	
R346	VE-30012657	RESISTOR	1/16W 1K J	
R347	VE-30014022	RESISTOR	1/16W 47R J	
R348	VE-30012655	RESISTOR	1/16W 180R J	
R349	VE-30014022	RESISTOR	1/16W 47R J	
R350	VE-30012692	RESISTOR	1/16W 4.7K J	
R352	VE-30012669	RESISTOR	1/16W 22K J	
R353	VE-30012641	RESISTOR	1/16W 10K J	
R354	VE-30012692	RESISTOR	1/16W 4.7K J	
R355	VE-30012659	RESISTOR	1/16W 2.2K J	
R356	VE-30012669	RESISTOR	1/16W 22K J	
R357	VE-30012692	RESISTOR	1/16W 4.7K J	
R358	VE-30012695	RESISTOR	1/16W 470R J	
R359	VE-30012659	RESISTOR	1/16W 2.2K J	
R360	VE-30012506	RESISTOR	1/16W 1.5K J	
R361	VE-30012657	RESISTOR	1/16W 1K J	
R362	VE-30012982	RESISTOR	1/16W 10R J	
R363	VE-30012695	RESISTOR	1/16W 470R J	
R364	VE-30012695	RESISTOR	1/16W 470R J	
R368	VE-30012692	RESISTOR	1/16W 4.7K J	
R369	VE-30012692	RESISTOR	1/16W 4.7K J	
R370	VE-30012669	RESISTOR	1/16W 22K J	
R371	VE-30012657	RESISTOR	1/16W 1K J	
R372	VE-30014022	RESISTOR	1/16W 47R J	
R373	VE-30012655	RESISTOR	1/16W 180R J	
R374	VE-30012692	RESISTOR	1/16W 4.7K J	
R375	VE-30012684	RESISTOR	1/16W 330R J	
R376	VE-30012692	RESISTOR	1/16W 4.7K J	
R377	VE-30012684	RESISTOR	1/16W 330R J	
R378	VE-30012684	RESISTOR	1/16W 330R J	
R379	VE-30012510	RESISTOR	1/16W 100R J	
R380	VE-30012669	RESISTOR	1/16W 22K J	
R381	VE-30012657	RESISTOR	1/16W 1K J	
R382	VE-30012982	RESISTOR	1/16W 10R J	
R383	VE-30012650	RESISTOR	1/16W 15K J	
R384	VE-30012679	RESISTOR	1/16W 3.9K J	
R385	VE-30012692	RESISTOR	1/16W 4.7K J	
R386	VE-30012506	RESISTOR	1/16W 1.5K J	
R387	VE-30012506	RESISTOR	1/16W 1.5K J	
R388	VE-30012641	RESISTOR	1/16W 10K J	
R389	VE-30012641	RESISTOR	1/16W 10K J	
R390	VE-30012692	RESISTOR	1/16W 4.7K J	
R391	VE-30012696	RESISTOR	1/16W 47K J	
R392	VE-30012696	RESISTOR	1/16W 47K J	
R393	VE-30012510	RESISTOR	1/16W 100R J	
R394	VE-30012641	RESISTOR	1/16W 10K J	
R395	VE-30012684	RESISTOR	1/16W 330R J	
R396	VE-30012684	RESISTOR	1/16W 330R J	
R397	VE-30012692	RESISTOR	1/16W 4.7K J	
R399	VE-30012692	RESISTOR	1/16W 4.7K J	
R400	VE-30012713	RESISTOR	1/16W 75R J	
R401	VE-30012713	RESISTOR	1/16W 75R J	
R402	VE-30012713	RESISTOR	1/16W 75R J	
R404	VE-30012713	RESISTOR	1/16W 75R J	
R405	VE-30012713	RESISTOR	1/16W 75R J	
R406	VE-30012713	RESISTOR	1/16W 75R J	
R407	VE-30012510	RESISTOR	1/16W 100R J	
R408	VE-30012510	RESISTOR	1/16W 100R J	
R409	VE-30012713	RESISTOR	1/16W 75R J	
R410	VE-30012644	RESISTOR	1/16W 12K J	
R411	VE-30012669	RESISTOR	1/16W 22K J	
R412	VE-30014078	RESISTOR	1/16W 22R J	
R413	VE-30012657	RESISTOR	1/16W 1K J	
R414	VE-30012713	RESISTOR	1/16W 75R J	
R415	VE-30012510	RESISTOR	1/16W 100R J	
R416	VE-30018254	RESISTOR ARRAY	1/16W 10R J	
R417	VE-30018254	RESISTOR ARRAY	1/16W 10R J	
R425	VE-30012695	RESISTOR	1/16W 470R J	
R426	VE-30012695	RESISTOR	1/16W 470R J	
R427	VE-30012695	RESISTOR	1/16W 470R J	
R431	VE-30012657	RESISTOR	1/16W 1K J	
R432	VE-30012657	RESISTOR	1/16W 1K J	
R434	VE-30012657	RESISTOR	1/16W 1K J	
R437	VE-30012713	RESISTOR	1/16W 75R J	
R438	VE-30012713	RESISTOR	1/16W 75R J	
R439	VE-30012713	RESISTOR	1/16W 75R J	
R440	VE-30012641	RESISTOR	1/16W 10K J	
R441	VE-30012641	RESISTOR	1/16W 10K J	
R442	VE-30012641	RESISTOR	1/16W 10K J	
R443	VE-30012641	RESISTOR	1/16W 10K J	
R450	VE-30012659	RESISTOR	1/16W 2.2K J	
R454	VE-30012692	RESISTOR	1/16W 4.7K J	
R456	VE-30012510	RESISTOR	1/16W 100R J	
R457	VE-30012510	RESISTOR	1/16W 100R J	

⚠Ref No.	Part No.	Part Name	Description	Local
R503	VE-30012510	RESISTOR	1/16W 100R J	
R504	VE-30012510	RESISTOR	1/16W 100R J	
R505	VE-30012510	RESISTOR	1/16W 100R J	
R506	VE-30012510	RESISTOR	1/16W 100R J	
R507	VE-30012698	RESISTOR	1/16W 5.6K J	
R508	VE-30012510	RESISTOR	1/16W 100R J	
R509	VE-30012641	RESISTOR	1/16W 10K J	
R510	VE-30012644	RESISTOR	1/16W 12K J	
R511	VE-30012696	RESISTOR	1/16W 47K J	
R512	VE-30012684	RESISTOR	1/16W 330R J	
R513	VE-30012713	RESISTOR	1/16W 75R J	
R514	VE-30012669	RESISTOR	1/16W 22K J	
R515	VE-30012669	RESISTOR	1/16W 22K J	
R516	VE-30012695	RESISTOR	1/16W 470R J	
R517	VE-30012659	RESISTOR	1/16W 2.2K J	
R518	VE-30012510	RESISTOR	1/16W 100R J	
R522	VE-30012685	RESISTOR	1/16W 33K J	
R523	VE-30012677	RESISTOR	1/16W 3.3K J	
R524	VE-30012643	RESISTOR	1/16W 120R J	
R525	VE-30012707	RESISTOR	1/16W 680R J	
R527	VE-30012705	RESISTOR	1/16W 6.8K J	
R528	VE-30012574	CAPACITOR	470pF 50V J	
R529	VE-30012982	RESISTOR	1/16W 10R J	
R530	VE-30014022	RESISTOR	1/16W 47R J	
R531	VE-30012692	RESISTOR	1/16W 4.7K J	
R600	VE-30012713	RESISTOR	1/16W 75R J	
R601	VE-30012713	RESISTOR	1/16W 75R J	
R602	VE-30012510	RESISTOR	1/16W 100R J	
R603	VE-30012510	RESISTOR	1/16W 100R J	
R604	VE-30012982	RESISTOR	1/16W 10R J	
R605	VE-30012695	RESISTOR	1/16W 470R J	
R606	VE-30012641	RESISTOR	1/16W 10K J	
R607	VE-30012692	RESISTOR	1/16W 4.7K J	
R608	VE-30012713	RESISTOR	1/16W 75R J	
R609	VE-30012982	RESISTOR	1/16W 10R J	
R610	VE-30012695	RESISTOR	1/16W 470R J	
R611	VE-30012641	RESISTOR	1/16W 10K J	
R612	VE-30012692	RESISTOR	1/16W 4.7K J	
R613	VE-30012713	RESISTOR	1/16W 75R J	
R614	VE-30000797	RESISTOR	1/10W 75R J	
R615	VE-30012713	RESISTOR	1/16W 75R J	
R617	VE-30012713	RESISTOR	1/16W 75R J	
R618	VE-30012982	RESISTOR	1/16W 10R J	
R619	VE-30012695	RESISTOR	1/16W 470R J	
R620	VE-30012641	RESISTOR	1/16W 10K J	
R621	VE-30012692	RESISTOR	1/16W 4.7K J	
R622	VE-30012713	RESISTOR	1/16W 75R J	
R623	VE-30012713	RESISTOR	1/16W 75R J	
R625	VE-30012982	RESISTOR	1/16W 10R J	
R626	VE-30012695	RESISTOR	1/16W 470R J	
R627	VE-30012641	RESISTOR	1/16W 10K J	
R628	VE-30012692	RESISTOR	1/16W 4.7K J	
R629	VE-30012713	RESISTOR	1/16W 75R J	
R630	VE-30000797	RESISTOR	1/10W 75R J	
R631	VE-30012713	RESISTOR	1/16W 75R J	
R632	VE-30012509	RESISTOR	1/16W 100K J	
R633	VE-30012509	RESISTOR	1/16W 100K J	
R634	VE-30012509	RESISTOR	1/16W 100K J	
R635	VE-30012509	RESISTOR	1/16W 100K J	
R636	VE-30012509	RESISTOR	1/16W 100K J	
R637	VE-30012509	RESISTOR	1/16W 100K J	
R700	VE-30012641	RESISTOR	1/16W 10K J	
R701	VE-30012641	RESISTOR	1/16W 10K J	
R702	VE-30012510	RESISTOR	1/16W 100R J	
R703	VE-30012510	RESISTOR	1/16W 100R J	
R704	VE-30012692	RESISTOR	1/16W 4.7K J	
R705	VE-30012685	RESISTOR	1/16W 33K J	
R706	VE-30012641	RESISTOR	1/16W 10K J	
R707	VE-30012685	RESISTOR	1/16W 33K J	
R708	VE-30012715	RESISTOR	1/16W 82K J	
R709	VE-30012715	RESISTOR	1/16W 82K J	
R710	VE-30012641	RESISTOR	1/16W 10K J	
R711	VE-30012510	RESISTOR	1/16W 100R J	
R712	VE-30012657	RESISTOR	1/16W 1K J	
R713	VE-30012657	RESISTOR	1/16W 1K J	
R714	VE-30012702	RESISTOR	1/16W 560R J	
R715	VE-30012702	RESISTOR	1/16W 560R J	
R716	VE-30012702	RESISTOR	1/16W 560R J	
R717	VE-30012702	RESISTOR	1/16W 560R J	
R718	VE-30012657	RESISTOR	1/16W 1K J	
R719	VE-30012657	RESISTOR	1/16W 1K J	
R720	VE-30023426	FIXED COIL	1.2uH K	
R721	VE-30023426	FIXED COIL	1.2uH K	
R722	VE-30023426	FIXED COIL	1.2uH K	
R723	VE-30012713	RESISTOR	1/16W 75R J	
R724	VE-30012713	RESISTOR	1/16W 75R J	
R725	VE-30012713	RESISTOR	1/16W 75R J	
R726	VE-30012657	RESISTOR	1/16W 1K J	
R727	VE-30012657	RESISTOR	1/16W 1K J	
R728	VE-30023426	FIXED COIL	1.2uH K	
R729	VE-30012713	RESISTOR	1/16W 75R J	
R730	VE-30023426	FIXED COIL	1.2uH K	
R731	VE-30012713	RESISTOR	1/16W 75R J	
R732	VE-30012713	RESISTOR	1/16W 75R J	
R733	VE-30023426	FIXED COIL	1.2uH K	
R734	VE-30012510	RESISTOR	1/16W 100R J	
R735	VE-30012510	RESISTOR	1/16W 100R J	
R736	VE-30012657	RESISTOR	1/16W 1K J	
R737	VE-30012657	RESISTOR	1/16W 1K J	
R738	VE-30012657	RESISTOR	1/16W 1K J	
R739	VE-30012657	RESISTOR	1/16W 1K J	
R740	VE-30000469	RESISTOR	1/10W 1K J	
R741	VE-30000469	RESISTOR	1/10W 1K J	
R742	VE-30012642	RESISTOR	1/16W 120K J	
R743	VE-30012644	RESISTOR	1/16W 12K J	
R744	VE-30012696	RESISTOR	1/16W 47K J	
R745	VE-30024719	RESISTOR	1/16W 47K F	
R746	VE-30024811	RESISTOR	1/16W 33K F	
R747	VE-30012713	RESISTOR	1/16W 75R J	
R748	VE-30012713	RESISTOR	1/16W 75R J	
R749	VE-30012668	RESISTOR	1/16W 220R J	
R751	VE-30012510	RESISTOR	1/16W 100R J	
R752	VE-30012657	RESISTOR	1/16W 1K J	
R753	VE-30012641	RESISTOR	1/16W 10K J	
R754	VE-30012641	RESISTOR	1/16W 10K J	
R756	VE-30012641	RESISTOR	1/16W 10K J	
R757	VE-30012641	RESISTOR	1/16W 10K J	
R759	VE-30012692	RESISTOR	1/16W 4.7K J	
R760	VE-30012641	RESISTOR	1/16W 10K J	
R761	VE-30010560	CAPACITOR	220nF 25V K	
R762	VE-30012713	RESISTOR	1/16W 75R J	
R763	VE-30012692	RESISTOR	1/16W 4.7K J	
R764	VE-30012657	RESISTOR	1/16W 1K J	
R765	VE-30012641	RESISTOR	1/16W 10K J	
R766	VE-30012509	RESISTOR	1/16W 100K J	
R767	VE-30012509	RESISTOR	1/16W 100K J	
R768	VE-30012509	RESISTOR	1/16W 100K J	
R769	VE-30012509	RESISTOR	1/16W 100K J	
R770	VE-30012641	RESISTOR	1/16W 10K J	
R771	VE-30012641	RESISTOR	1/16W 10K J	
R778	VE-30012641	RESISTOR	1/16W 10K J	
R779	VE-30012509	RESISTOR	1/16W 100K J	
R780	VE-30012669	RESISTOR	1/16W 22K J	
R784	VE-30010560	CAPACITOR	220nF 25V K	
R785	VE-30010560	CAPACITOR	220nF 25V K	
R786	VE-30012713	RESISTOR	1/16W 75R J	
R787	VE-30012713	RESISTOR	1/16W 75R J	
R788	VE-30012657	RESISTOR	1/16W 1K J	
R800	VE-30012692	RESISTOR	1/16W 4.7K J	
R901	VE-30012641	RESISTOR	1/16W 10K J	
R902	VE-30012509	RESISTOR	1/16W 100K J	
R903	VE-30012641	RESISTOR	1/16W 10K J	
R904	VE-30012641	RESISTOR	1/16W 10K J	
R907	VE-30012510	RESISTOR	1/16W 100R J	
R908	VE-30012510	RESISTOR	1/16W 100R J	
R909	VE-30012677	RESISTOR	1/16W 3.3K J	
R910	VE-30012510	RESISTOR	1/16W 100R J	
R911	VE-30012510	RESISTOR	1/16W 100R J	
R912	VE-30012655	RESISTOR	1/16W 180R J	
R913	VE-30012659	RESISTOR	1/16W 2.2K J	
R915	VE-30012703	RESISTOR	1/16W 56K J	
R916	VE-30000833	RESISTOR	1/10W 91R J	
R917	VE-30000833	RESISTOR	1/10W 91R J	
R918	VE-30012705	RESISTOR	1/16W 6.8K J	
R919	VE-30000588	RESISTOR	1/10W 220R J	
R920	VE-30000469	RESISTOR	1/10W 1K J	
R921	VE-30000558	RESISTOR	1/10W 180R J	
R922	VE-30012641	RESISTOR	1/16W 10K J	
R923	VE-30012641	RESISTOR	1/16W 10K J	
R924	VE-30012641	RESISTOR	1/16W 10K J	
R925	VE-30012641	RESISTOR	1/16W 10K J	
R926	VE-30012641	RESISTOR	1/16W 10K J	
R927	VE-30012641	RESISTOR	1/16W 10K J	
R928	VE-30012641	RESISTOR	1/16W 10K J	
R929	VE-30012642	RESISTOR	1/16W 120K J	
L101	VE-30001971	FERRITE	600R/100MHz 200mA	
L104	VE-30001971	FERRITE	600R/100MHz 200mA	
L105	VE-30001971	FERRITE	600R/100MHz 200mA	
L109	VE-30001971	FERRITE	600R/100MHz 200mA	
L110	VE-30001971	FERRITE	600R/100MHz 200mA	
L111	VE-30001971	FERRITE	600R/100MHz 200mA	
L113	VE-30020896	FERRITE	120R/100MHz 200mA	
L300	VE-30017143	FIXED COIL	22uH J	

⚠Ref No.	Part No.	Part Name	Description	Local
L301	VE-30018093	FIXED COIL	3.3uH J	
L302	VE-30018093	FIXED COIL	3.3uH J	
L303	VE-30018093	FIXED COIL	3.3uH J	
L304	VE-30001990	FIXED COIL	6.8uH K	
L305	VE-30001990	FIXED COIL	6.8uH K	
L306	VE-30001971	FERRITE	600R/100MHz 200mA	
L307	VE-30006712	FERRITE BEAD		
L308	VE-30002170	FERRITE CORE	1A	
L309	VE-30001971	FERRITE	600R/100MHz 200mA	
L401	VE-30001971	FERRITE	600R/100MHz 200mA	
L402	VE-30001971	FERRITE	600R/100MHz 200mA	
L408	VE-30001971	FERRITE	600R/100MHz 200mA	
L409	VE-30001996	FIXED COIL	22uH K	
L501	VE-30001971	FERRITE	600R/100MHz 200mA	
L502	VE-30001971	FERRITE	600R/100MHz 200mA	
L503	VE-30001971	FERRITE	600R/100MHz 200mA	
L504	VE-30001996	FIXED COIL	22uH K	
L600	VE-30017143	FIXED COIL	22uH J	
L700	VE-30001971	FERRITE	600R/100MHz 200mA	
L701	VE-30001971	FERRITE	600R/100MHz 200mA	
L702	VE-30001971	FERRITE	600R/100MHz 200mA	
L703	VE-30001971	FERRITE	600R/100MHz 200mA	
L704	VE-30001971	FERRITE	600R/100MHz 200mA	
L705	VE-30001971	FERRITE	600R/100MHz 200mA	
L707	VE-30001971	FERRITE	600R/100MHz 200mA	
L708	VE-30001971	FERRITE	600R/100MHz 200mA	
L709	VE-30001971	FERRITE	600R/100MHz 200mA	
L710	VE-30006712	FERRITE BEAD		
L711	VE-30013412	FERRITE	1.5K/100MHz 500 mA	
L712	VE-30013412	FERRITE	1.5K/100MHz 500 mA	
L713	VE-30001971	FERRITE	600R/100MHz 200mA	
L714	VE-30001971	FERRITE	600R/100MHz 200mA	
L715	VE-30001971	FERRITE	600R/100MHz 200mA	
L716	VE-30001971	FERRITE	600R/100MHz 200mA	
L717	VE-30001971	FERRITE	600R/100MHz 200mA	
L718	VE-30024779	FERRITE	50R/100MHz 3A	
L719	VE-30024779	FERRITE	50R/100MHz 3A	
L721	VE-30024779	FERRITE	50R/100MHz 3A	
L722	VE-30024779	FERRITE	50R/100MHz 3A	
L723	VE-30001971	FERRITE	600R/100MHz 200mA	
L724	VE-30013412	FERRITE	1.5K/100MHz 500 mA	
L725	VE-30013412	FERRITE	1.5K/100MHz 500 mA	
L726	VE-30001971	FERRITE	600R/100MHz 200mA	
L727	VE-30001971	FERRITE	600R/100MHz 200mA	
L728	VE-30001971	FERRITE	600R/100MHz 200mA	
L729	VE-30001971	FERRITE	600R/100MHz 200mA	
L734	VE-30001971	FERRITE	600R/100MHz 200mA	
L800	VE-30018093	FIXED COIL	3.3uH J	
L801	VE-30002170	FERRITE CORE	1A	
L802	VE-30020394	FERRITE	330R/100MHz 3A	
L803	VE-30020394	FERRITE	330R/100MHz 3A	
L900	VE-30002170	FERRITE CORE	1A	
L901	VE-30019475	FIXED COIL	47uH	
L903	VE-30002170	FERRITE CORE	1A	
L904	VE-30019475	FIXED COIL	47uH	
L906	VE-30001996	FIXED COIL	22uH K	
L907	VE-30002170	FERRITE CORE	1A	
L908	VE-30019475	FIXED COIL	47uH	
L910	VE-30002002	FIXED COIL	47uH K	
L911	VE-30011450	FIXED COIL	22uH	
⚠F900	VE-30035282	FUSE	5A/32VDC	
⚠F901	VE-30028331	FUSE	7A/32VDC	
JK700	VE-30001902	MINI JACK	PC AUDIO IN	
JK702	VE-30001891	PIN JACK	EXT3-AUDIO IN(L)	
JK703	VE-30001892	PIN JACK	EXT3-Pr IN	
JK704	VE-30001892	PIN JACK	EXT3-AUDIO IN(R)	
JK705	VE-30032233	PIN JACK	EXT3-Y IN	
JK706	VE-30032234	PIN JACK	EXT3-Pb IN	
JK901	VE-30027932	DC POWER SOCKET	DC 24V IN	
PL101	VE-30032051	D SOCKET	D-SUB	
PL700	VE-30018089	SOCET SCART	EXT-1	
PL701	VE-30018089	SOCET SCART	EXT-2	
S730	VE-30012695	RESISTOR	1/16W 470R J	
TU500	VE-30040264	TUNER		
X100	VE-30017946	CLYSTAL	14.318MHZ	
X300	VE-30006662	CLYSTAL	6.000MHz	
X400	VE-30008778	CLYSTAL	20.250MHz	
X500	VE-30021113	CLYSTAL	4MHZ	
X700	VE-30001756	CLYSTAL	18.432MHz	
Z500	VE-30001692	SAW FILTER		
Z501	VE-30012545	SAW FILTER		

AV JACK P.W. BOARD ASS'Y (VE-20224823)

⚠Ref No.	Part No.	Part Name	Description	Local
D100	VE-30038475	Z DIODE		
D101	VE-30038475	Z DIODE		
D102	VE-30038475	Z DIODE		
D103	VE-30038475	Z DIODE		
D104	VE-30038475	Z DIODE		
D105	VE-30038475	Z DIODE		
D106	VE-30038475	Z DIODE		
D107	VE-30038475	Z DIODE		
D108	VE-30038475	Z DIODE		
D109	VE-30038475	Z DIODE		
C100	VE-30012569	CAPACITOR	33pF 50V J	
C101	VE-30012569	CAPACITOR	33pF 50V J	
C102	VE-30012569	CAPACITOR	33pF 50V J	
C103	VE-30012560	CAPACITOR	100pF 50V J	
C104	VE-30012560	CAPACITOR	100pF 50V J	
C105	VE-30012560	CAPACITOR	100pF 50V J	
C106	VE-30012589	CAPACITOR	4.7nF 50V K	
C107	VE-30012589	CAPACITOR	4.7nF 50V K	
C108	VE-30012560	CAPACITOR	100pF 50V J	
C109	VE-30012560	CAPACITOR	100pF 50V J	
C110	VE-30012560	CAPACITOR	100pF 50V J	
R100	VE-30012695	RESISTOR	1/16W 470R J	
R101	VE-30012695	RESISTOR	1/16W 470R J	
R102	VE-30014078	RESISTOR	1/16W 22R J	
R103	VE-30014078	RESISTOR	1/16W 22R J	
R104	VE-30012695	RESISTOR	1/16W 470R J	
R105	VE-30012695	RESISTOR	1/16W 470R J	
R106	VE-30012695	RESISTOR	1/16W 470R J	
R107	VE-30014078	RESISTOR	1/16W 22R J	
R108	VE-30014078	RESISTOR	1/16W 22R J	
L100	VE-30020393	FERRITE	600R/100MHz 200mA	
L101	VE-30020393	FERRITE	600R/100MHz 200mA	
L102	VE-30020393	FERRITE	600R/100MHz 200mA	
L103	VE-30020393	FERRITE	600R/100MHz 200mA	
L104	VE-30020393	FERRITE	600R/100MHz 200mA	
L105	VE-30020393	FERRITE	600R/100MHz 200mA	
L106	VE-30020393	FERRITE	600R/100MHz 200mA	
L107	VE-30020393	FERRITE	600R/100MHz 200mA	
L108	VE-30020393	FERRITE	600R/100MHz 200mA	
L109	VE-30020393	FERRITE	600R/100MHz 200mA	
L110	VE-30020393	FERRITE	600R/100MHz 200mA	
L111	VE-30020393	FERRITE	600R/100MHz 200mA	
L112	VE-30020393	FERRITE	600R/100MHz 200mA	

⚠Ref No.	Part No.	Part Name	Description	Local
L113	VE-30020393	FERRITE	600R/100MHz 200mA	
L114	VE-30020393	FERRITE	600R/100MHz 200mA	
L115	VE-30020393	FERRITE	600R/100MHz 200mA	
L116	VE-30020393	FERRITE	600R/100MHz 200mA	
L117	VE-30020393	FERRITE	600R/100MHz 200mA	
L118	VE-30020393	FERRITE	600R/100MHz 200mA	
L119	VE-30020393	FERRITE	600R/100MHz 200mA	
L120	VE-30020393	FERRITE	600R/100MHz 200mA	
JK100	VE-30032640	S JACK	EXT4-S-VIDEO IN	
JK101	VE-30032639	PIN JACK	EXT4-VIDEO IN	
JK102	VE-30032638	PIN JACK	EXT4-AUDIO IN(R)	
JK103	VE-30032636	PIN JACK	EXT4-AUDIO IN(L)	
JK104	VE-30031077	HEADPHONE JACK	HEADPHONE	
JK105	VE-30032636	PIN JACK	SUBWOOFER	
JK106	VE-30032636	PIN JACK	AUDIO OUT(L)	
JK107	VE-30032638	PIN JACK	AUDIO OUT(R)	

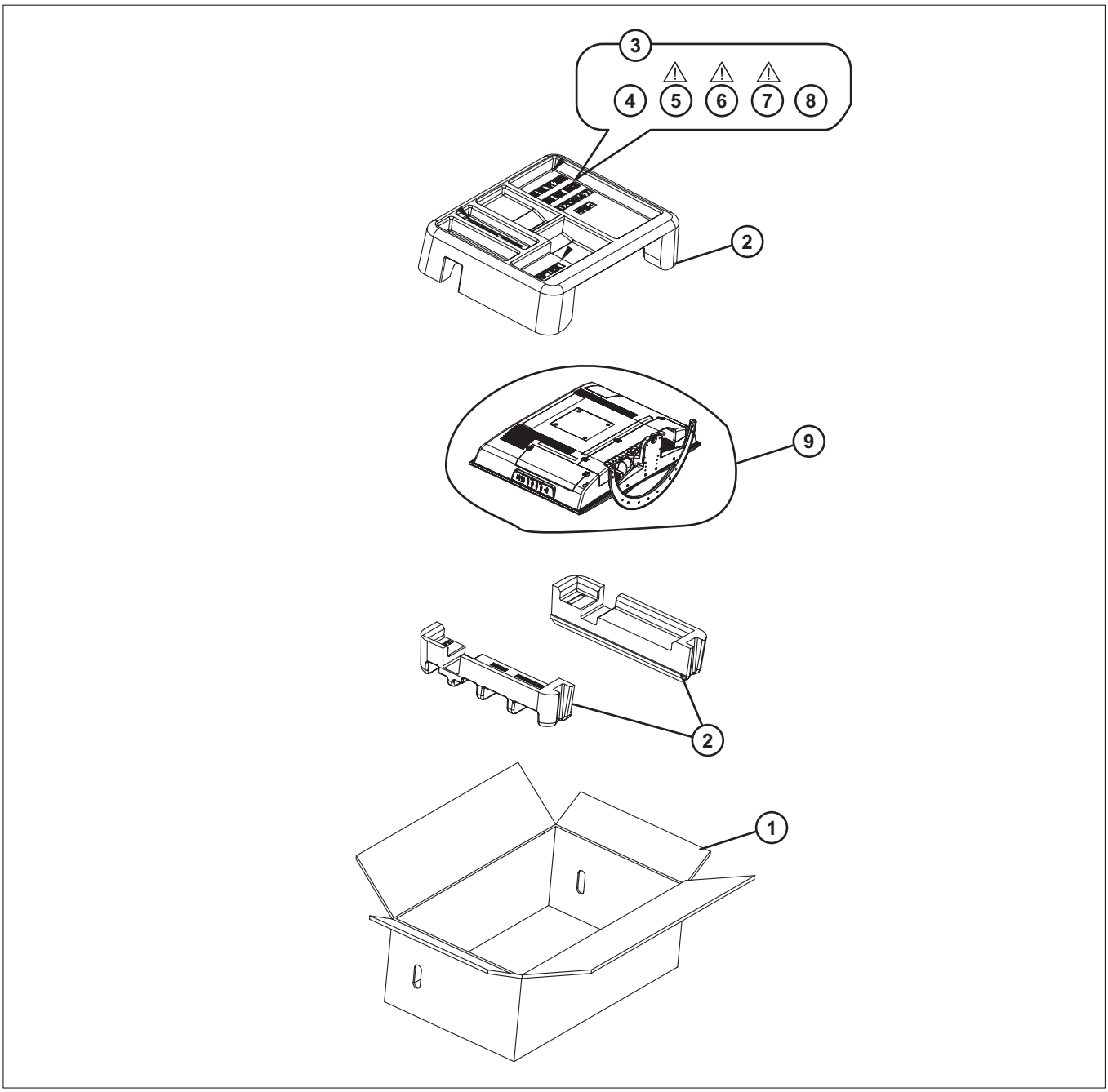
SIDE CONTROL P.W. BOARD ASS'Y (VE-20224821)

⚠Ref No.	Part No.	Part Name	Description	Local
R1	VE-30000689	RESISTOR	1/4W 3.9K J	
R2	VE-30000526	RESISTOR	1/4W 1.5K J	
R3	VE-30000770	RESISTOR	1/4W 680R J	
R4	VE-30000712	RESISTOR	1/4W 470R J	
R5	VE-30000623	RESISTOR	1/4W 270R G	
SW1	VE-30032684	TACT SWITCH	VOLUME -	
SW2	VE-30032684	TACT SWITCH	VOLUME +	
SW3	VE-30032684	TACT SWITCH	PROGRAM -	
SW4	VE-30032684	TACT SWITCH	PROGRAM +	
SW5	VE-30032684	TACT SWITCH	MENU/OK	
SW6	VE-30032684	TACT SWITCH	STAND-BY	
SW7	VE-30032684	TACT SWITCH	TV/AV	

LED P.W. BOARD ASS'Y (VE-20220627)

⚠Ref No.	Part No.	Part Name	Description	Local
IC1	VE-30019223	IC		
D1	VE-30019678	LED	RED/GREEN	
C1	VE-30000371	E CAPACITOR	22uF 50V M	
R1	VE-30000459	RESISTOR	1/4W 100R J	

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	VE-50074664	CARTON BOX		LT-20A60SJ
	1	VE-50074683	CARTON BOX		LT-20A60SU
	2	VE-20217803	CUSHION ASSEMBLY		
	3	VE-70000587	POLY BAG		
	4	VE-30034032	REMOTE CONTROL UNIT	RM-C1860	
⚠	5	VE-50074507	INSTRUCTION BOOK	[ENG]	LT-20A60SJ
⚠	5	VE-50074666	INSTRUCTION BOOK	[ENG/GER/FRA/ITA]	LT-20A60SU
⚠	5	VE-50074681	INSTRUCTION BOOK	[BUL/RUS/ROM]	LT-20A60SU
⚠	5	VE-50074669	INSTRUCTION BOOK	[SPA/POR/DUT]	LT-20A60SU
⚠	5	VE-50074670	INSTRUCTION BOOK	[POL/CZE/HUN]	LT-20A60SU
⚠	5	VE-50074668	INSTRUCTION BOOK	[SWE/DAN/NOR/FIN]	LT-20A60SU
⚠	6	VE-30002376	POWER CORD		
⚠	7	VE-30030071	ADAPTER	DC24V	
	8	----------	BATTERY	(AA/R6 TYPE) (x2)	
	9	VE-50000007	POLY BAG		

JVC

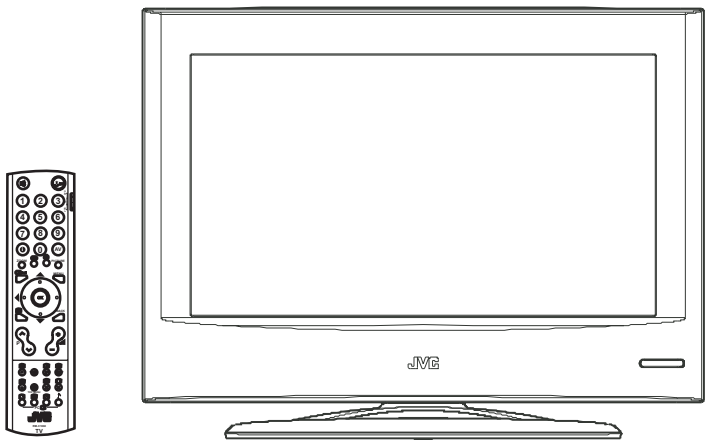
SCHEMATIC DIAGRAMS

WIDE LCD PANEL TELEVISION

LT-20A60SJ,
LT-20A60SU

CD-ROM No.SML200511

InteriArt



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No.YA353
2005/11

LT-20A60SJ, LT-20A60SU
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	: DC 20kΩ/V
(4)Oscilloscope sweeping time	: H ⇒ 20μs / div
	: V ⇒ 5ms / div
	: Othters ⇒ Sweeping time is specified
(5)Voltage values	: All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	: [Ω]
K	: [kΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/16 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Uninflammable resistor
FR	: Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50[V]
Others	: DC withstand voltage [V]
AC indicated	: AC withstand voltage [V]

∗ Electrolytic Capacitors

47/50[Example]: Capacitance value [μF]/withstand voltage[V]

● Type

No indication	: Ceramic capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3)Coils

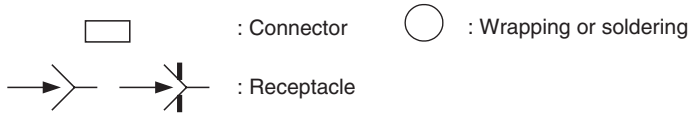
No unit	: [μH]
Others	: As specified

(4)Power Supply

∗ Respective voltage values are indicated

(5)Test point

(6)Connecting method



(7)Ground symbol

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time.
If the above precaution is not respected, a fuse or any parts will be broken.

◆ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◆ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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- **SIDE CONTROL PWB PATTERN 2-25**
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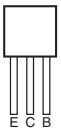
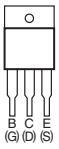
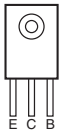
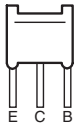
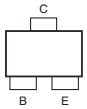
USING P.W. BOARD

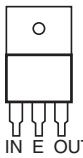
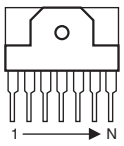
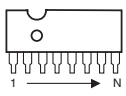
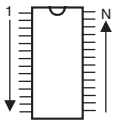
PWB ASS'Y name	LT-20A60SJ	LT-20A60SU
MAIN P.W. BOARD	VE-20220013	←
AV JACK P.W. BOARD	VE-20224823	←
SIDE CONTROL P.W. BOARD	VE-20224821	←
LED P.W. BOARD	VE-20220627	←

SEMICONDUCTOR SHAPES

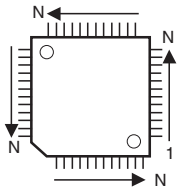
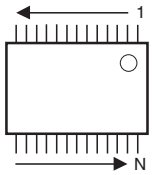
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

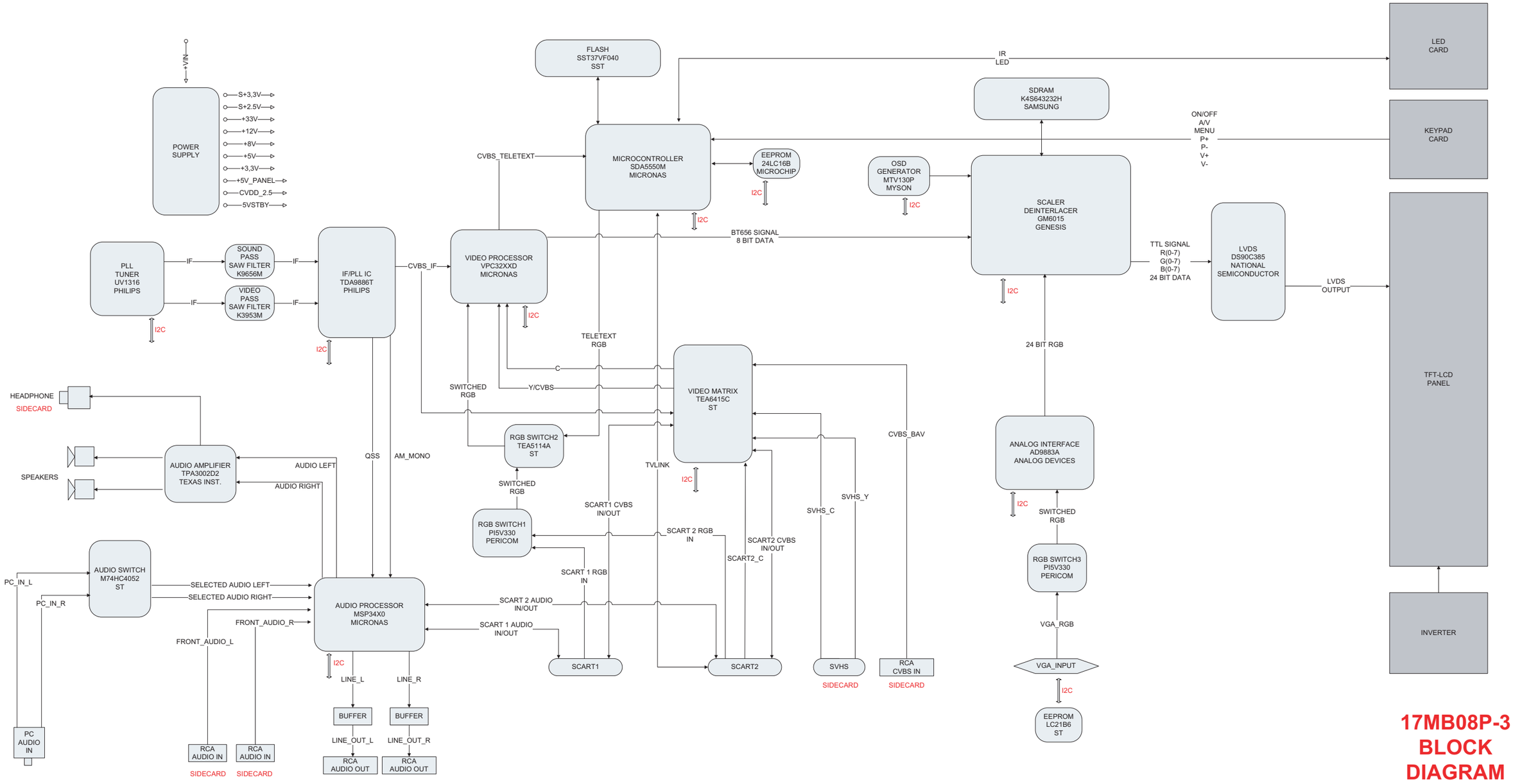
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

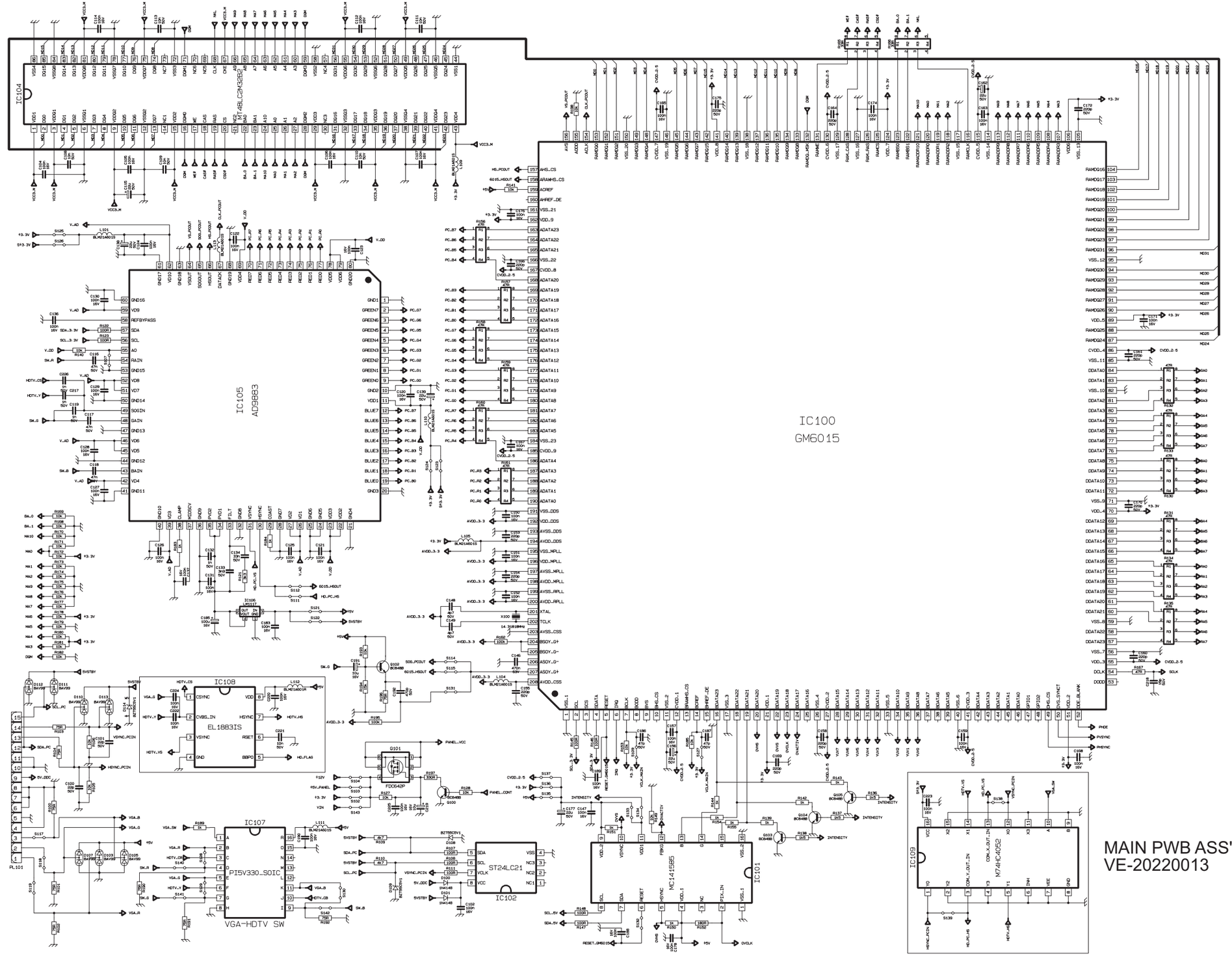
BLOCK DIAGRAM



17MB08P-3 BLOCK DIAGRAM

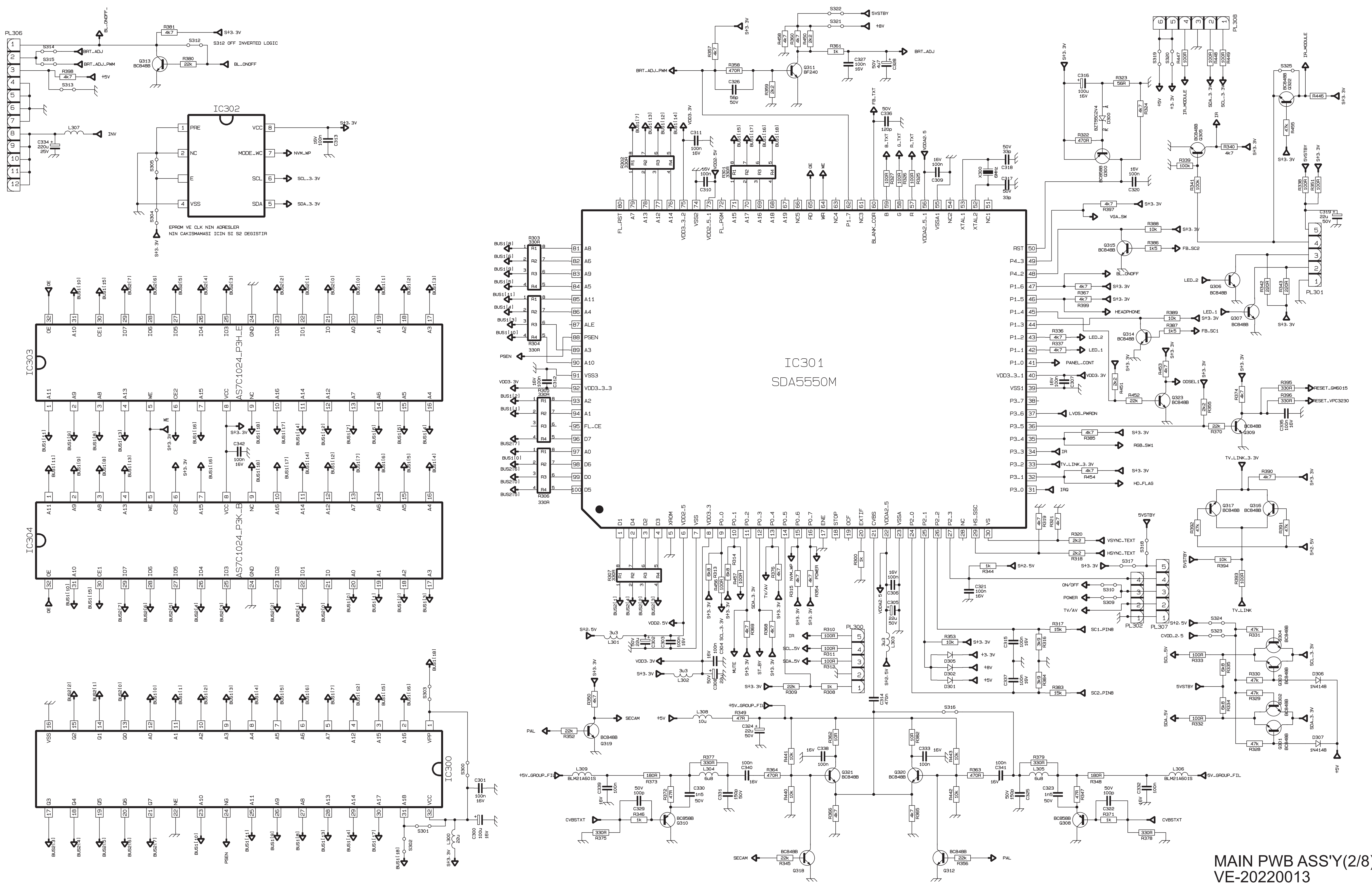
CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM (1/8)



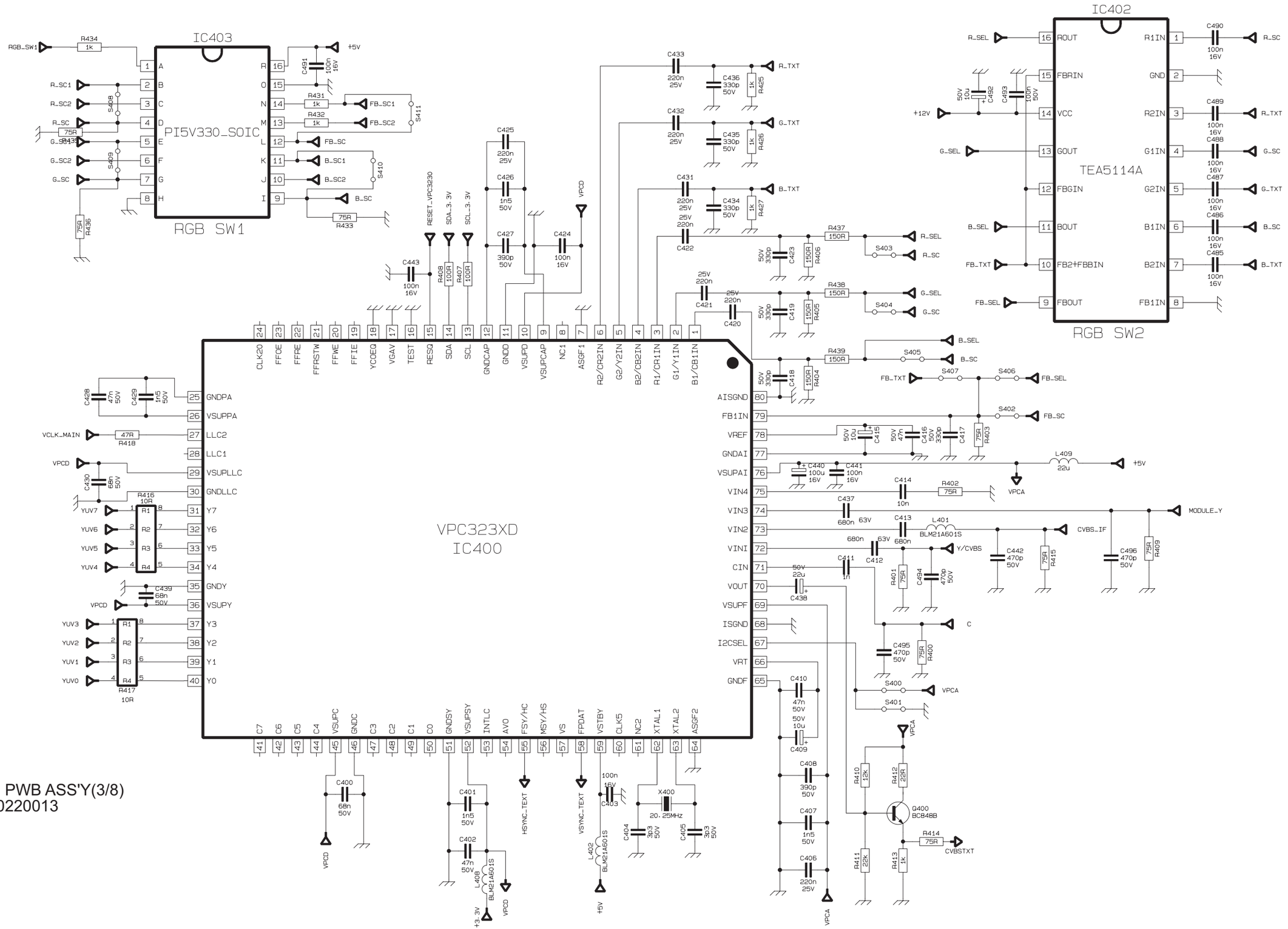
MAIN PWB ASS'Y(1/8)
VE-20220013

NOTE : Refer to the part list for the part number of IC300 and IC302.

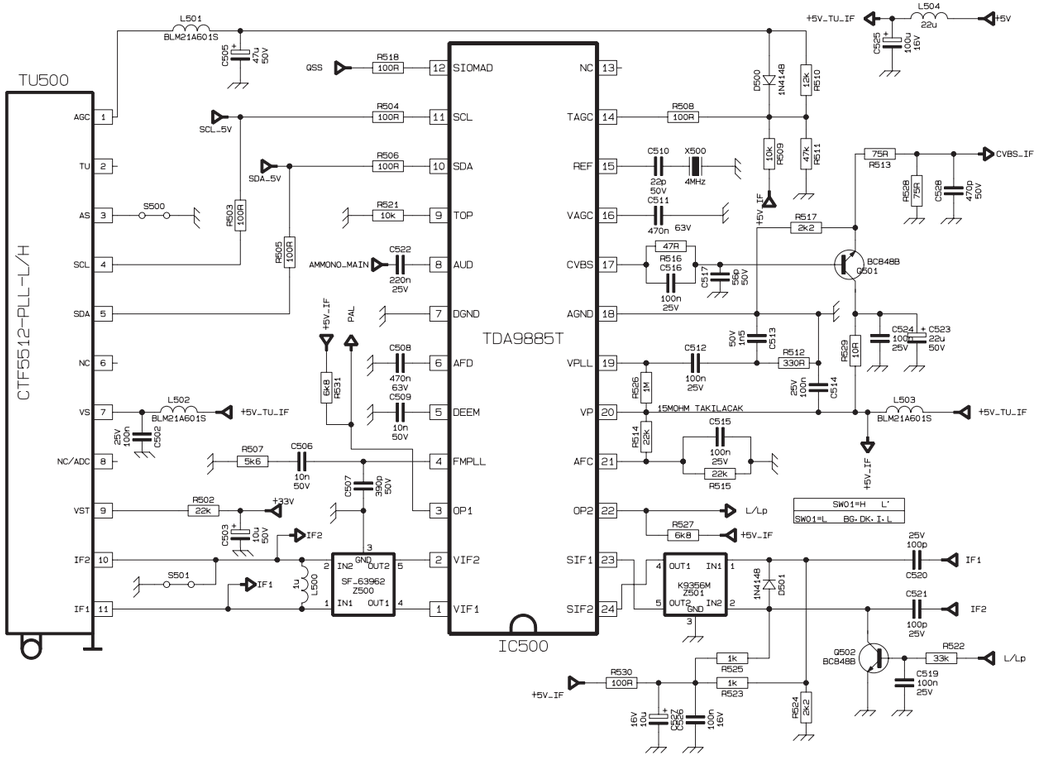


MAIN PWB ASS'Y(2/8)
VE-20220013

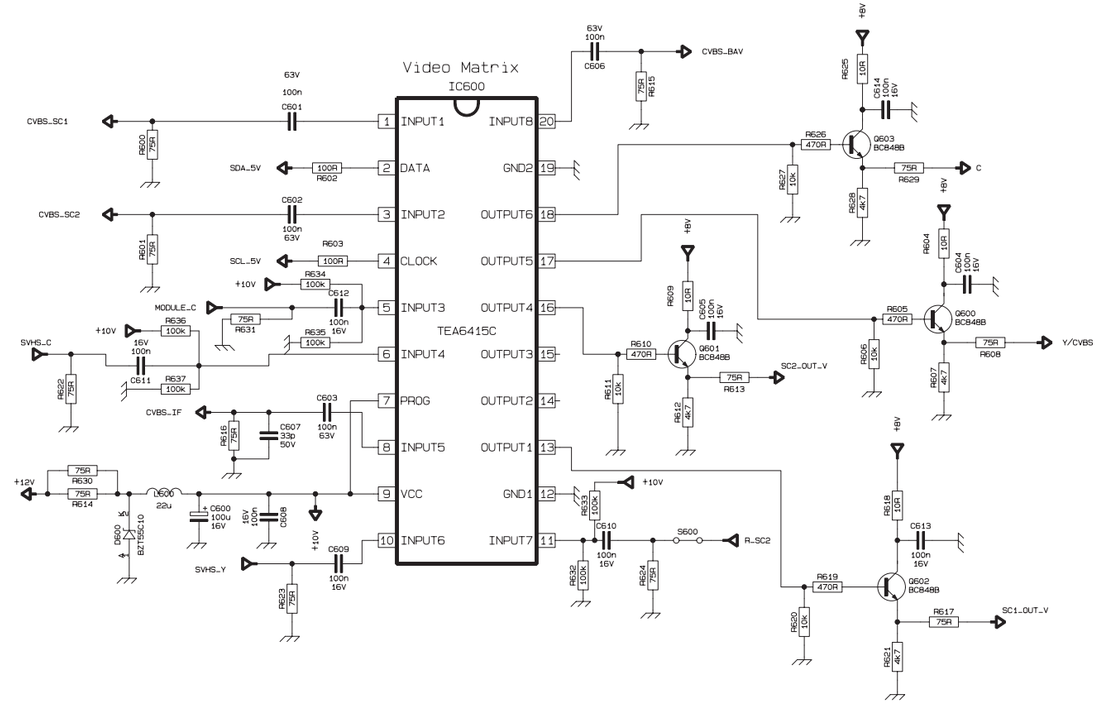
MAIN PWB CIRCUIT DIAGRAM (3/8)



MAIN PWB ASS'Y(3/8)
VE-20220013

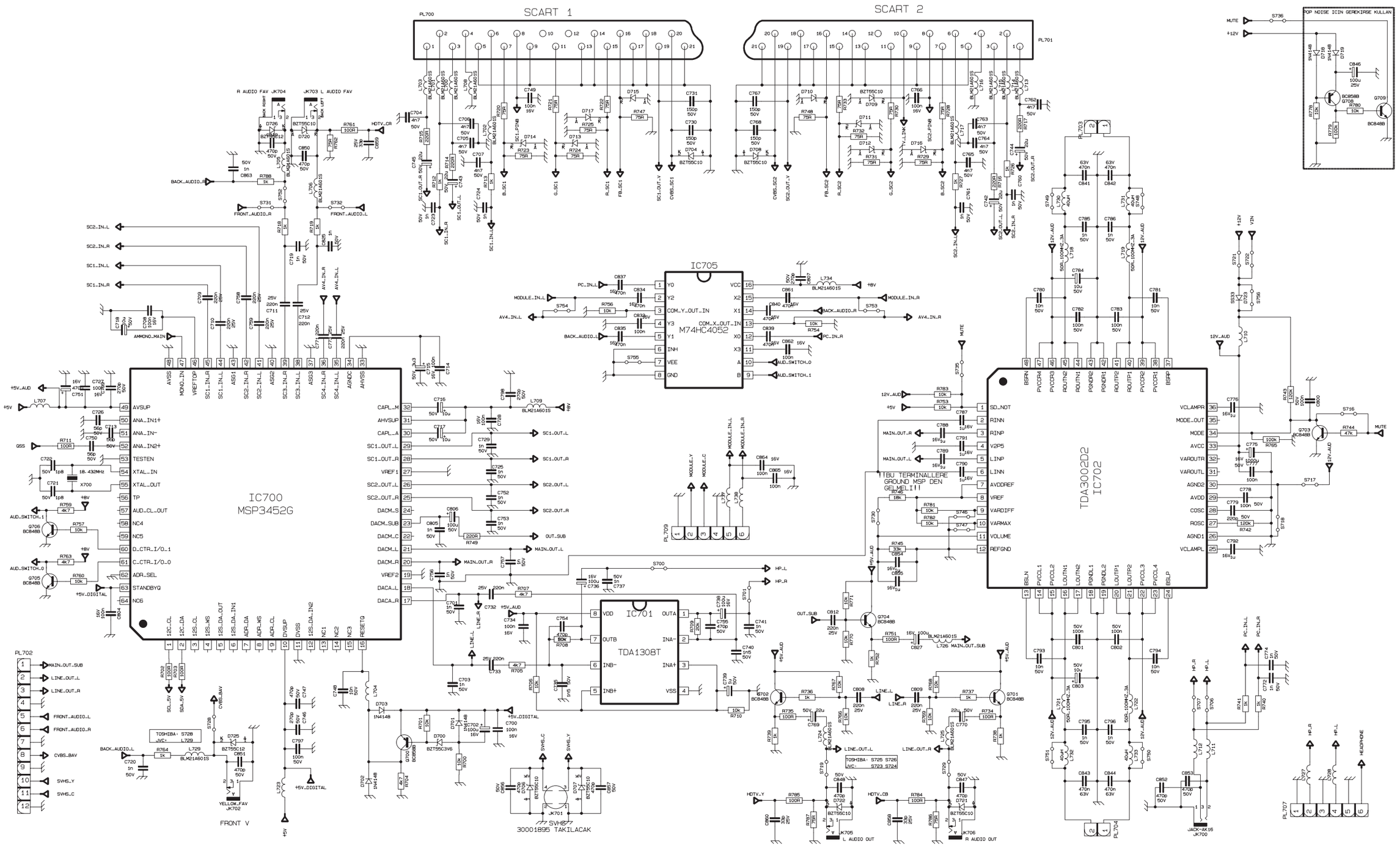


MAIN PWB ASS'Y(4/8)
VE-20220013



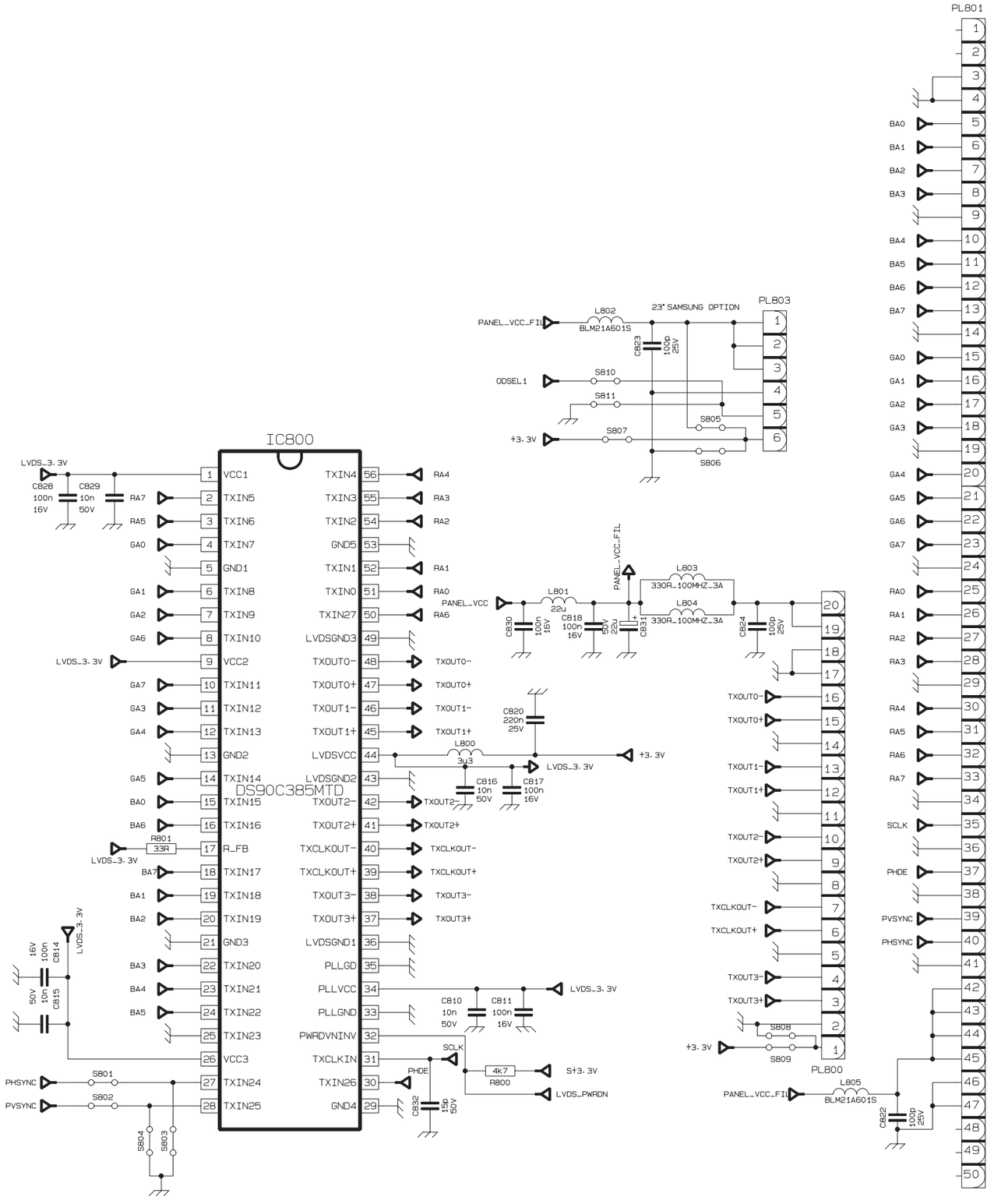
MAIN PWB ASS'Y(5/8)
VE-20220013

MAIN PWB CIRCUIT DIAGRAM (6/8)



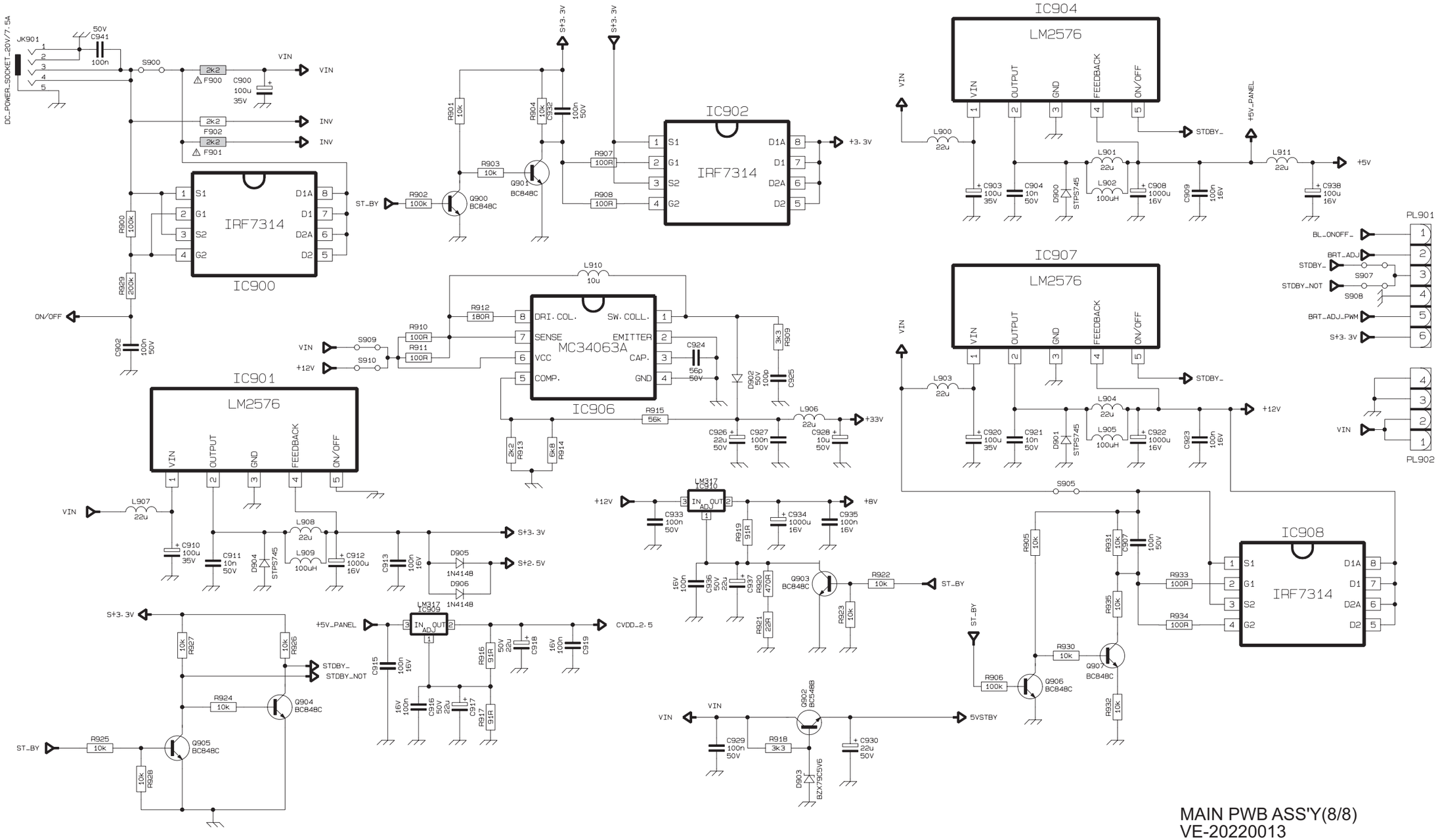
MAIN PWB ASS'Y(6/8)
VE-20220013

MAIN PWB CIRCUIT DIAGRAM (7/8)



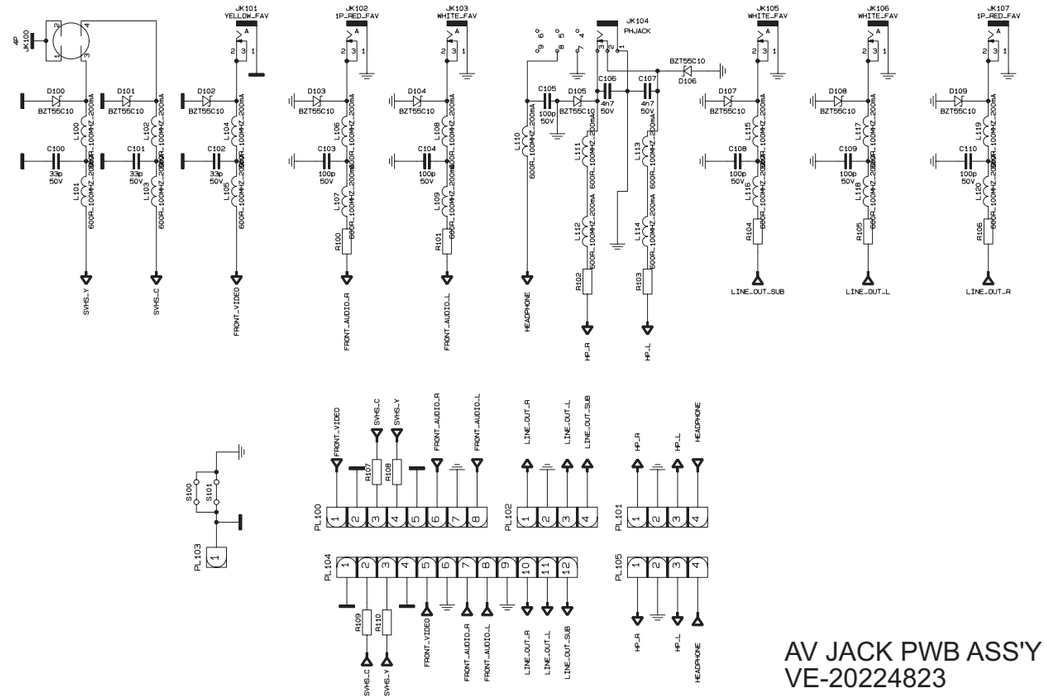
MAIN PWB ASS'Y(7/8)
VE-20220013

MAIN PWB CIRCUIT DIAGRAM (8/8)



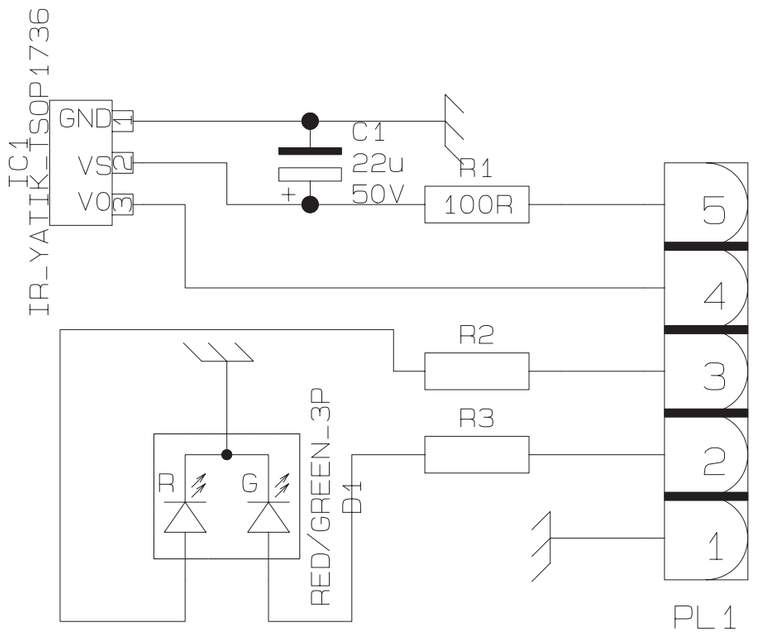
MAIN PWB ASS'Y(8/8)
VE-20220013

AV JACK PWB CIRCUIT DIAGRAM



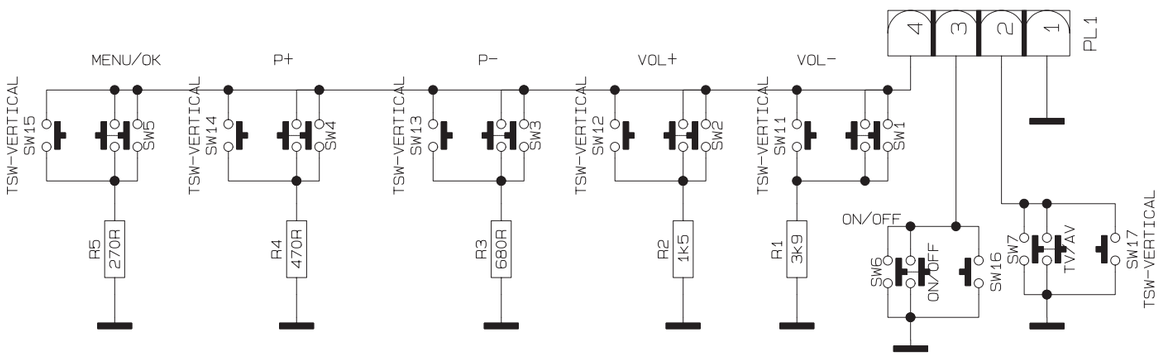
AV JACK PWB ASS'Y
VE-20224823

LED PWB CIRCUIT DIAGRAM



LED PWB ASS'Y
VE-20220627

SIDE CONTROL PWB CIRCUIT DIAGRAM

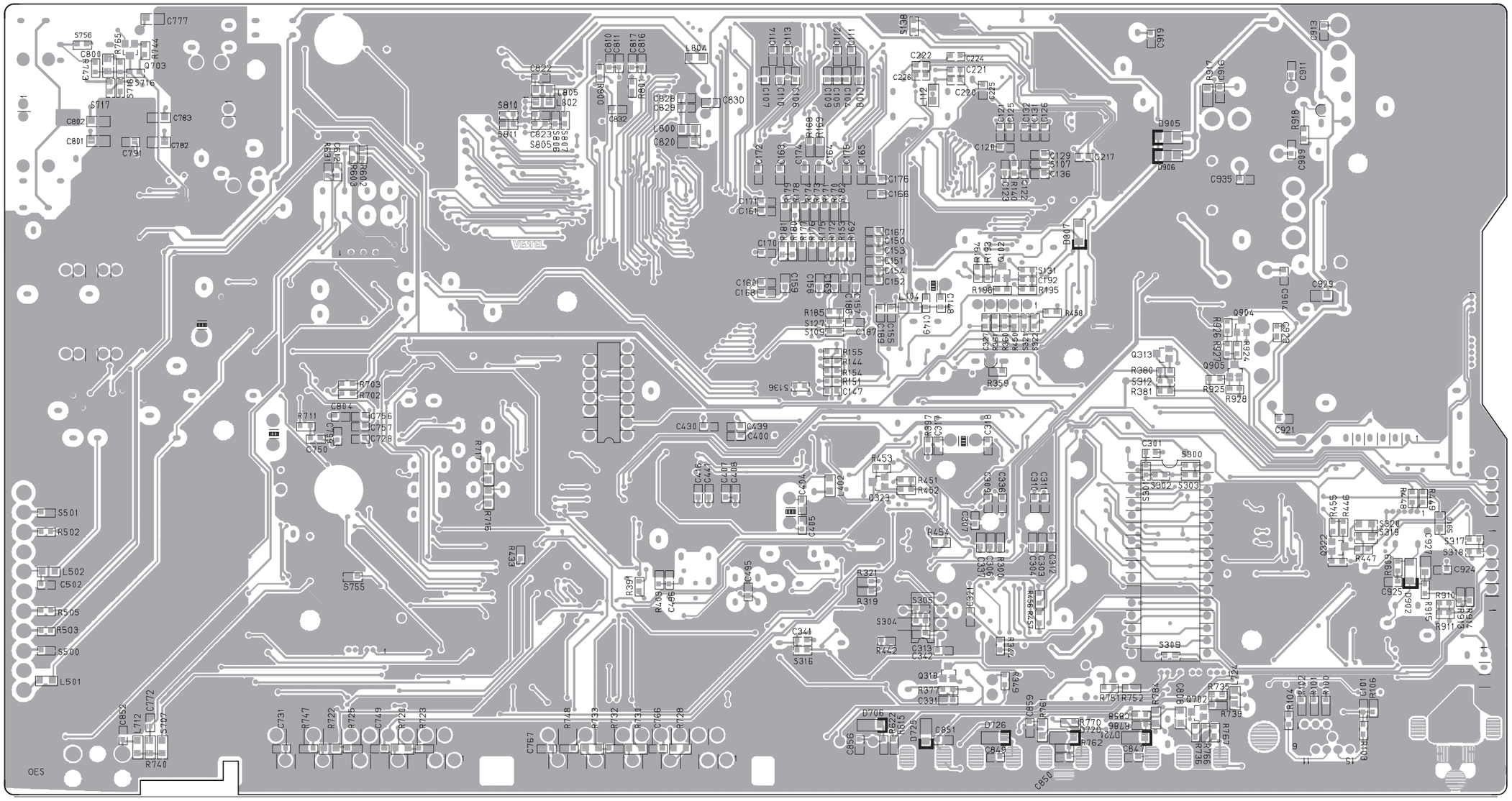


SIDE CONTROL PWB ASS'Y
VE-20224821

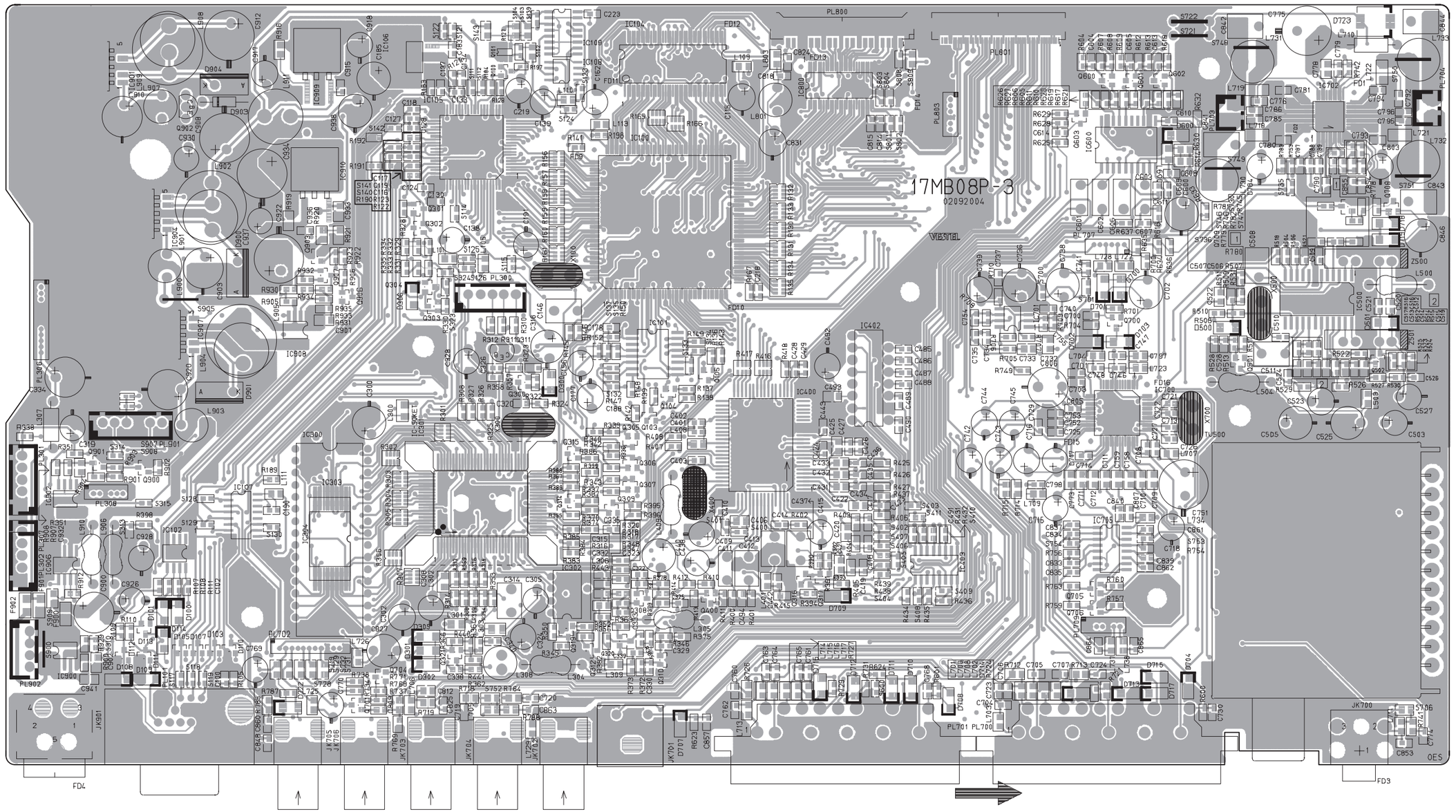
PATTERN DIAGRAMS

MAIN PWB PATTERN [SOLDER SIDE]

TOP

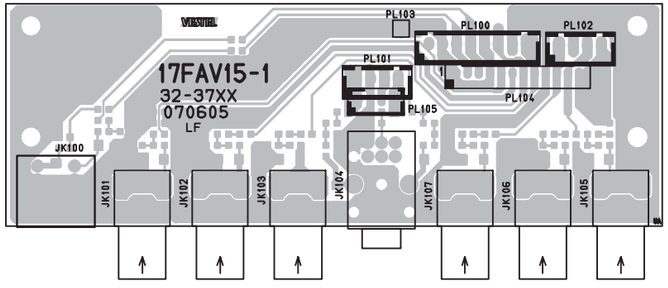


MAIN PWB PATTERN [PARTS SIDE]



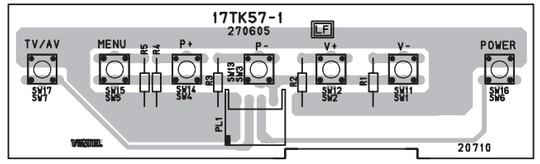
AV JACK PWB PATTERN

TOP

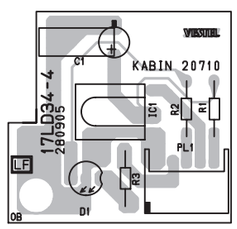


SIDE CONTROL PWB PATTERN

TOP



LED PWB PATTERN



TOP

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